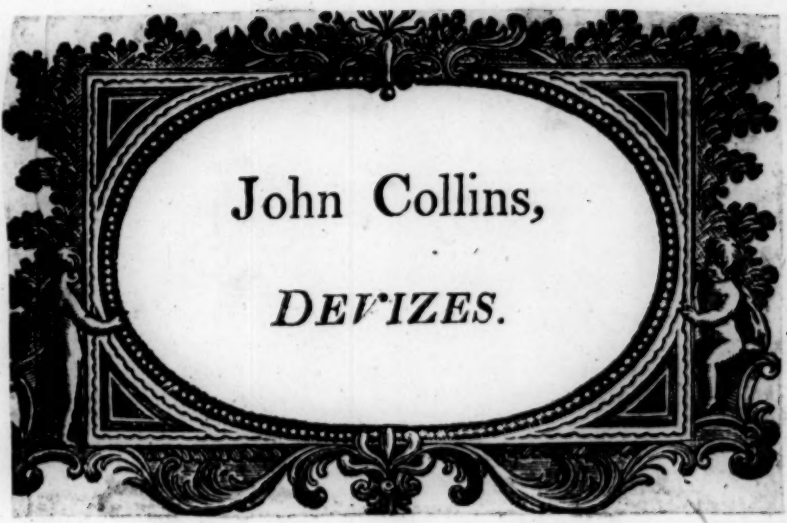
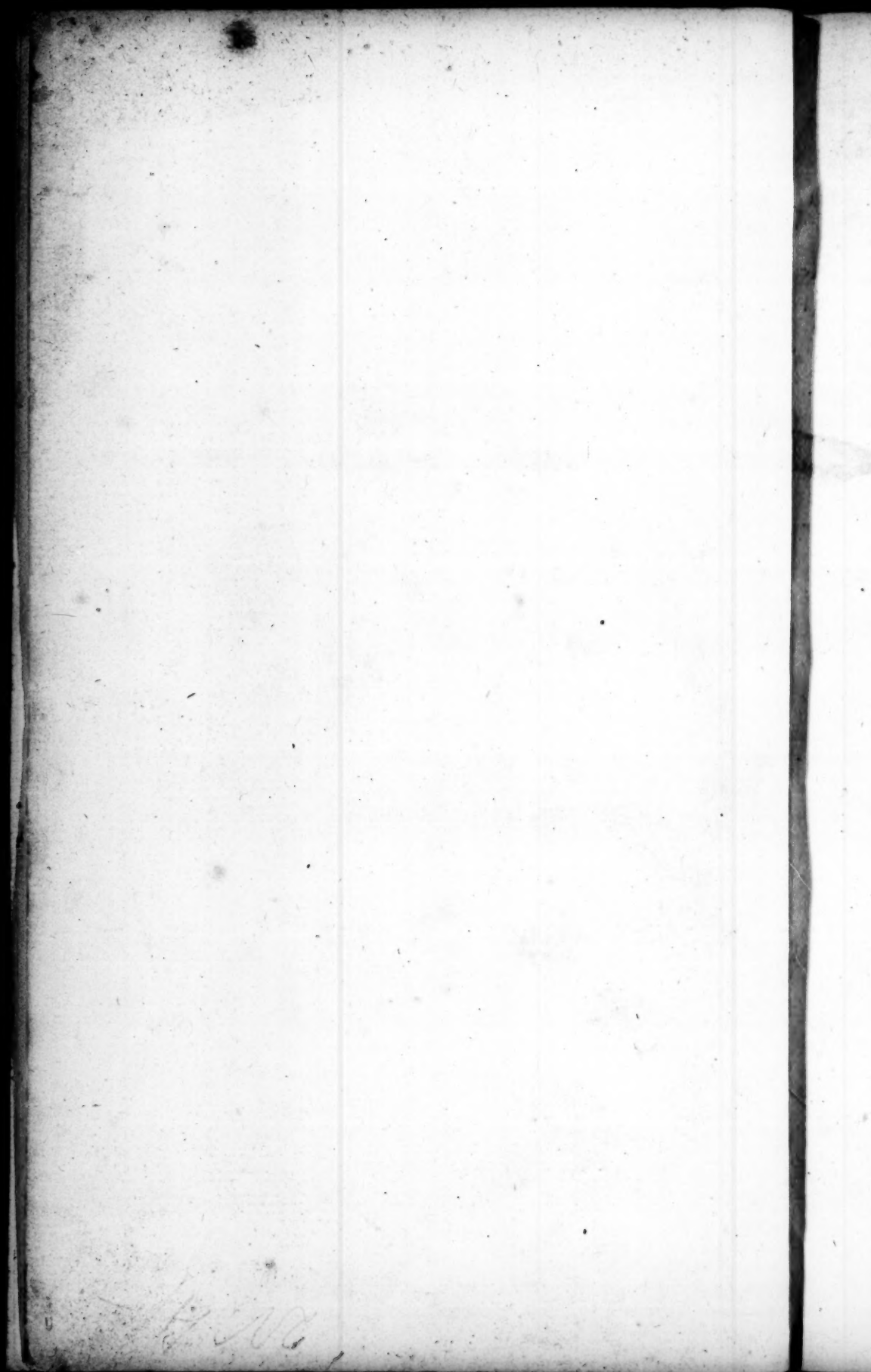
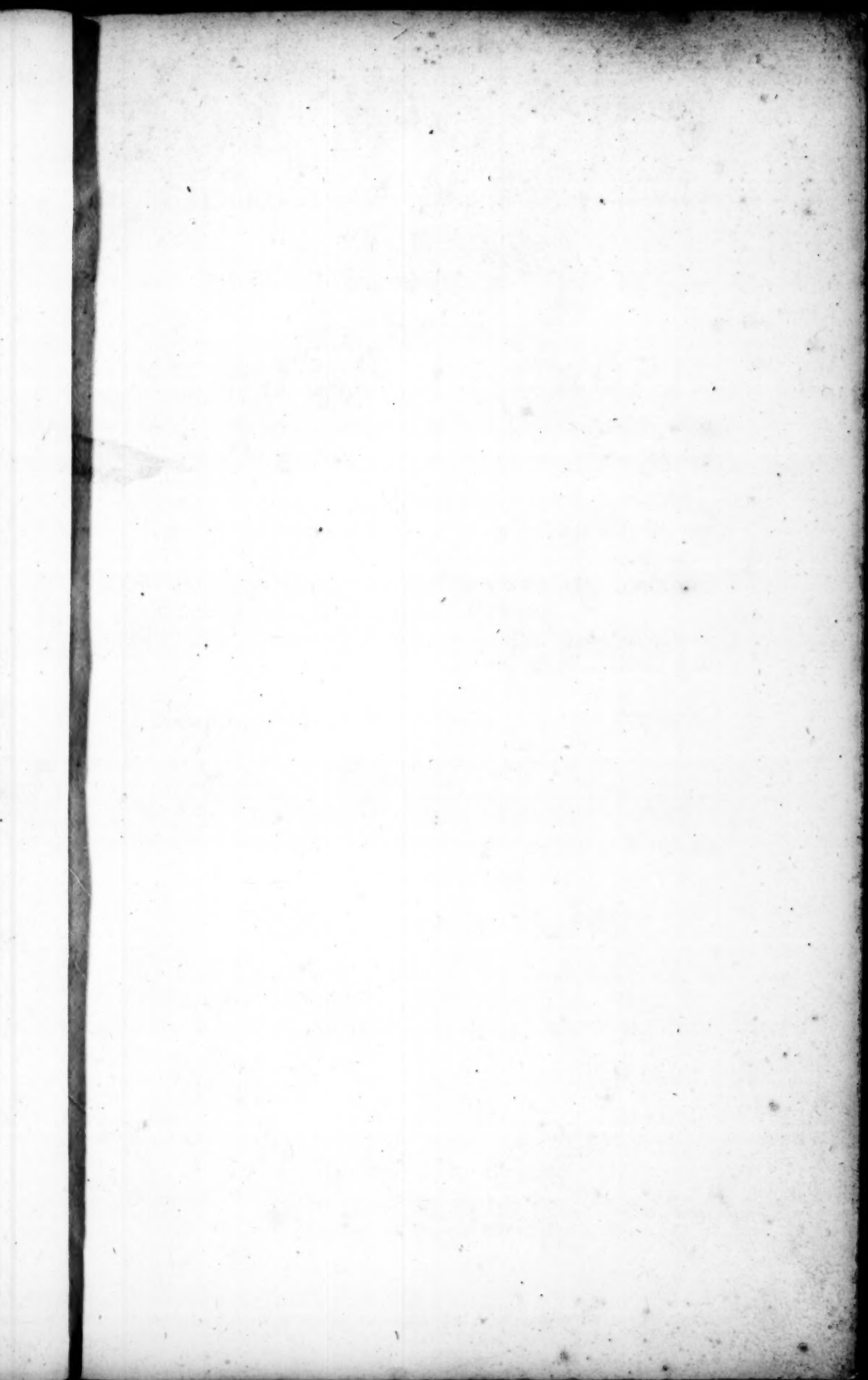




John Collins,

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MEMOIRS

Historical and Military:

CONTAINING
A DISTINCT VIEW

Of all the Considerable
STATES of *EUROPE*.

With an accurate Account of the Wars in which they have been Engaged, from the Year 1672, to the Year 1710.

Interspersed with various Reflections on the Views, Politicks, and Interests of the several Princes and Republicks, by whom those Wars were commenced or sustained.

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Written by the Late

Marquis *DE FEUQUIERES*,

Lieutenant-General of the *French* Army; For the Instruction of his Son.

Translated from the *French*.

With PRELIMINARY REMARKS and a
MILITARY DICTIONARY, explaining
the Difficult Terms in the Art of War,

By the TRANSLATOR.

VOL. II.

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Historical and Military

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S E C O N D V O L U M E.

C HAP. XXXI. <i>Of Battles.</i>	Page 1.
CHAP. XXXII. <i>Of Blockades</i>	201
CHAP. XXXIII. <i>Of the manner of investing Places.</i>	206
CHAP. XXXIV. <i>Of Camps entrenched under the Walls of Towns.</i>	217
CHAP. XXXV. <i>Of Lines of Circumvallation.</i>	232
CHAP. XXXVI. <i>Of the Attack of a Place.</i>	245
CHAP. XXXVII. <i>Of Saps, and Demi-Saps.</i>	263
CHAP. XXXVIII. <i>Of Batteries of Cannon and Mortars.</i>	264
CHAP. XXXIX. <i>Of Lodgments on the Glacis.</i>	267
CHAP. XL. <i>Of the Attack of Out-Works.</i>	217
CHAP. XLI. <i>Of the Attack of Counter-scarps, and Covert-ways.</i>	286
CHAP.	

CONTENTS.

CHAP. XLII. <i>Of the Passage over Ditches.</i>	Page 291
CHAP. XLIII. <i>Of Mines.</i>	293
CHAP. XLIV. <i>Of Breaches.</i>	295
CHAP. XLV. <i>Of inward Intrenchments.</i>	296
CHAP. XLVI. <i>Of Assaults.</i>	304
CHAP. XLVII. <i>Of Capitulations.</i>	307
CHAP. XLVIII. <i>Of the Defence of Places that are attacked.</i>	321
CHAP. XLIX. <i>Of Winter Quarters.</i>	360
CHAP. L. <i>Of Contributions.</i>	363

ERRATA.

Vol. 2. p. 211. lines 15, 16. for ruinous, read
 razant. Page 263. for Chap. 36. read Chap. 37.
 Page 264. for Chap. 37. read Chap. 38. Page
 293. after Chap. 4. add, *Of Mines.*

MEMOIRS

Historical and Military.

C H A P. XXXI.

Of Battles.

I have already declared, in that Chapter of my Maxims, which sets forth the Inducements a General may have to come to an Engagement with his Enemy, that he always ought to give Battle in Consequence of his own voluntary Choice, and endeavour to prevent his Enemy from forcing him upon that important Action. I have likewise represented the particular Manner and Attentions with which he ought to approach an Enemy he intends to attack; the different Dispositions that may be made, with respect to the different Situations of the Field of Battle, and the Precautions necessary to be observed, in order to diversify the Form of Battle with Safety, as the Circumstances may require: I have pointed out the proper Attentions which ought to employ a General, as well before a Battle, as during the Time of its Continuance, and after its Conclusion:

Vol. II.

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In

In a Word, I have collected all the general Rules which can be given, with Regard to this grand Operation of War. My present Reflections on this vast Subject, will be very copious, because I shall extend them to those Battles and extraordinary Encounters, which have decided the Fate of some great Expedition. The Instances I shall produce, both with Relation to this Subject, and my General Precepts, shall be drawn from the Events of those Battles and great Encounters, wherein I have been personally engaged; or from the authentic Relations I have received of those which were fought in my Time, and in which I happened not to be present. All those Examples will make it evident, by the variety of Situations and Particularities which have produced such great Events, that this Subject is very extensive; that it is impossible to add any particular Maxims to my general Precepts; and that a Commander in Chief ought to be capable of many different Attentions, at the same Instant, to secure himself a happy Event.

The word *Battle*, is properly applied to those Actions which pass between two Armies ranged in their Military Array, and who engage in a Country sufficiently open for the Lines to charge in Front, and at the same Period of Time; or, at least, for the greatest part of the Line to charge in a Front equal

to

HISTORICAL *and* MILITARY. 3

to that which is opposed against it, while the other part continues in its Station, in Compliance with the Difficulties that prevent it from sharing in the Action. The other great Engagements, tho' they are generally of a longer Continuance, and even more destructive than those I have mentioned, are only called Encounters. The Reason of this Diversity proceeds from the various Dispositions of the Armies, and the Circumstances which usually attend the Events of these two Species of important Actions.

The loss of a Battle generally occasions the Loss of the Artillery, and very frequently that of the Baggage. An Army, therefore, when it has sustain'd a Defeat, being no longer in a Condition to face its victorious Enemy, till it has repair'd its Losses, is obliged, for a considerable Time, to let the Conqueror remain Master of the Field, as well as of the Execution of those Enterprises which are proper for him to form, agreeably to the measure of his Success in that Battle, and in proportion to his Abilities to compleat them.

A Defeat sustain'd in a great Encounter, tho' it may prove more fatal to the Men, yet it seldom is attended with the Loss of all the Artillery, and very rarely with that of the Baggage; because the Armies having not been able to engage in a Front extended to

its full Length, must, consequently, have only suffer'd in that part which shared the Heat of the Action ; and tho', in order to attack or sustain, it became necessary, from time to time, to draw out fresh Troops from that part of the Front which could not engage, yet the Action, having not been general, can only occasion a greater or less Loss of Men, without that extraordinary Influence on the Events of the Campaign, and the Decision of the Superiority, which may be effected by a regular Battle ; and without producing the Loss of the Baggage, or even the Artillery, of which no more can be lost, than what is found on the Spot where the Disadvantage was sustained.

The Encoun- The first Example, with which I
ter at *Woerden*, intend to illustrate the Subject of
in 1672. this Chapter, shall be the Encoun-
ter at *Woerden*, in which M. de *Luxembourg*
attacked the Prince of *Orange*, in the Year
1672.

This Prince had determined to besiege *Woerden*, which was not defended by any Outworks, and where M. de *Luxembourg* had station'd a Garrison of about 2000 Men. The Place was of great Importance to both Parties, for it covered *Utrecht*, and opened a free Passage into *Holland*, when the Ice should facilitate the March of the Troops, thro' that part of the Country which the
Dutch

Dutch had been obliged to lay under Water.

The Parts adjacent to this Place, were all form'd in such a manner, that it could receive no Relief, without forcing the Entrenchments which *M. de Luxembourg* was inform'd the Enemy had thrown up on the Dikes.

The Prince of *Orange* was equally inclin'd to direct his Motions to *Naerden*, a Town situated on the *Zuider-Zee*; or to the Fort of *Crevecoer*; or *Bomal*; for which Reason, *M. de Luxembourg*, who was determin'd to oppose the Execution of that Prince's Design, deferr'd his March, till the other had fixed the Plan of his Operations. When he had Intelligence that *Woerden* was invest'd, he march'd thither, with all possible Expedition, at the Head of a considerable Body of Foot, tho' much inferior to the Enemy in Number; because he would not give them sufficient Time to make their Intrenchments, on the Dikes, too strong; and because he could not oppose them, on any particular Dike, with more Troops than that Work was capable of containing; and he likewise thought, that if he could find it practicable to march his Foot through the Inundation, he might attack the Dikes in Flank, in the Night, while the Enemies Troops would be employ'd in sustaining the Attack at the Head of the Line.

The Conveniency of the Canals and Inundations, for the easy Conveyance of Materials proper for Works of Defence, enabled the Prince of *Orange* to form good Intrenchments on the Dike of the old *Rhine*, between *Harmelin* and *Woerden*, and to palisade and fraize the *Parapet* of his Intrenchment, and plant Cannon upon it. He likewise made several other Intrenchments, between this and *Woerden*, with a View to multiply Difficulties for M. de *Luxembourg*, when he came to make his Attack: His Attention was also employed on the Canal which flows from *Camerick*, and disgorges it self in the Old *Rhine* near *Woerden*; and he raised Intrenchments on the Dike of that Canal in three Places.

The Prince was guilty of two Oversights in this Disposition, notwithstanding all his Precaution. The first was his neglect to sieze the Village of *Harmelin*, in which there was a Church with a commodious Burying Ground, where M. de *Luxembourg* had posted 50 Men, to secure the Communication between *Utrecht* and *Woerden*, against the Enemies Garrison in *Oudewater*.

If this Church, which was seated to the left of the Old *Rhine*, had been possessed by a Body of Foot, and fortified with Cannon, it would have been very difficult for M. de *Luxembourg* to have approached *Woerden*,
with-

HISTORICAL and MILITARY. 7

without forcing the Church, or demolishing it with his Cannon, which would have wasted Time, and delayed his nearer Advance to *Woerden*.

The second Mistake which the Prince of *Orange* committed, was his Omission either to guard or break down the Bridge built over the Canal, in the Village of *Camerick*, and which gave *M. de Luxembourg* an Opportunity of attacking the Intrenchments on that Canal, in Front and Flank, by marching into the Inundation.

M. de Luxembourg arrived with his Troops at *Harmelin*, a little before the close of Day, and had Time enough to take a full Survey of the Intrenchments on the Dike of the Old *Rhine*. He judged it would be very difficult to force them in Front, and when it grew dark, he only left his Dragoons before the Intrenchments, with Orders to attack them very gently, when they heard him assault those, which, as I have already observed, were raised on the Dike of *Camerick*.

This General marched then, with all his Foot, to *Camerick*, and the Prince of *Orange* had not the least Intelligence of this Motion, which was performed through a Country floated with Water. Our Men perceived, at their Arrival, that the Bridge was neither broken down nor guarded, so that all the Foot were on the other side of the Canal, a-

bove two Hours before Day ; at the Dawn of which, as being the most commodious Season for Actions of that Nature, M. *de Luxembourg* attacked an Intrenchment that was form'd round a Wind-mill, and carried it. He then marched his Forces into the Water, which, in that place, was about two Feet in Depth, and assaulted the other Intrenchments in Flank, which had not been covered for want of time, and had very little Strength, except in Front; and we forced our way to the Dike on the Old *Rhine*, leaving in our Rear, the Intrenchments at *Harmelin*; and after a very fierce Engagement between the Foot, which was the warmest I have ever seen, and lasted above five Hours, we forced these Intrenchments, and relieved the Town. The Enemy had 6000 Men, at least, killed and wounded, and lost a great number of General Officers, with the Cannon planted on the Intrenchments.

This is a memorable Instance of the Activity of M. *de Luxembourg*, who would not suffer the Enemy to continue, twenty four Hours, before *Woerden*, without attacking them; and of the Valour of our Troops, whom no Opposition could intimidate, in the whole course of a long and severe Encounter.

We began the Action with 5000 Men, and had 2500 killed and wounded.

The

HISTORICAL *and* MILITARY. 9

The Necessity of resolving on this Engagement with all Expedition, was the more urgent, because the Enemy had already planted their Cannon before the Gates of the Town (which, as I have intimated, was not defended by any Outworks) and as the Quantity of its Ammunition was very inconsiderable, it must have surrender'd in a few Hours, if it had not been relieved.

The second Instance of a sharp Encounter, and very different, in ^{The Encounter at Seneffe.} its Nature, from that of *Woerden*, was the Action of *Seneffe* in 1674. I rank this among the Number of Encounters, and think it improper to call it a Battle, because the Armies were too much streighten'd in Ground, to be form'd in Battle Array, and the Front Lines were always of a very inconsiderable Extent; besides, this Engagement was carried on, against a Column which comprehended the greatest part of the Enemies Forces, who were upon their March; and not against an Army disposed in Order of Battle.

This Encounter lasted above sixteen Hours, for it began at Eight in the Morning, and continued till Midnight: The Number of dead Bodies that were buried in the Field where the Action happen'd, exceeded 27000, as the Curates of the adjoining Villages declared. It was discontinued, on our part, through

10 M E M O I R S

through meer Fatigue, and because the rough and contracted space of Ground on which we fought, ended in a spacious Plain, where all the Vanguard of the Enemies Horse, who had not suffered in the Engagement, was drawn up in Order of Battle, to receive the defeated Troops; and likewise because the Infantry of their Van-guard (who had halted above the Village of *Fays*, and were then disposed in Array, having in their Front a hollow Way, extending, from that Village, to a Wood which supported the Infantry on the left) was station'd too well to be forced, and especially as there were two Lines of Horse regularly drawn up behind them.

I shall not repeat any Particulars, on which I have enlarged elsewhere, but with an Intention to silence those who envy the Prince of *Conde's* Glory, and have reproached him for not disposing all the Front of his Army in such a manner, as might have enabled them to execute some happy Design against the Enemy. But it was not reasonable to imagine, that the Enemy, when they decamped so near the King's Army, would be so extremely negligent, and so strangely inconsiderate and presumptuous as they proved. The Prince could only expect an Engagement between the Rear-Guard, and the Horse and Foot, who were posted within, and behind the Village

HISTORICAL *and* MILITARY. II

lage of *Seneffe*, when his Troops began their secret Motion, in order to follow the Column of their Army. For how could he imagine the Enemy would have the Temerity to let the Columns of their Army continue their March, without posting some Troops in the first Defile, to receive those of the Rear-Guard, in case they had been charged and thrown into Disorder? How could it be supposed that so trivial a Precaution would have been neglected either thro' Presumption or Ignorance?

This Instance of Misconduct in the Enemy, justifies my Maxims, which declare against the Neglect of any Attentions necessary to secure the Motions a General is disposed to make; and it demonstrates that the least Omissions in War, may be attended with fatal Events. For the Enemies Neglect to secure this first Defile, on the back of their Rear-Guard, was the sole Cause of this great Event, which, had it not been for this inconsiderate Circumstance, would have only proved a very flight and short Engagement with a small Body of Horse in the Rear-Guard, who could have been driven no farther than this Defile.

I shall not make any Observations on the Disposition of the Army, before this Encounter. It was then in the Field, where the Drums had only beat the General by Way of Precau-

Precaution. The Prince of *Condé* had only commanded those Troops to file off from the left of his Army, and advance beyond *Seneffe* in a direct Line, and out of the View of the Enemy, which he would have employed against their Rear-Guard, if that Body had began its March without any Precaution, when it put it self in Motion to follow the Column of the Army.

The Encounter at *Woerden* differ'd from that at *Seneffe* as much as possible, in Consequence of the different Situations and Dispositions of the Troops. That of *Woerden* was a Military Action in one particular place, and against a Body of Forces intrenched upon a Dike; and all the Advantages to accomplish that fortunate Event, were judiciously taken upon the very spot where the Engagement began at the Dawn of Day. That of *Seneffe*, on the contrary, did not begin till Eight in the Forenoon, and the Prince of *Condé* being in a Place, where, from the first Break of the Morning, he saw the Enemy begin the March of their Army, and post their Rear-Guard, must needs imagine that some Battalions of the Foot, (who form'd the Rear, in the March of that Column) would be ordered to possess the first Defile, to receive the Rear-Guard. But as that Disposition was neglected, it was impossible for him to be acquainted with the Enemies Misconduct, till it was committed;

HISTORICAL *and* MILITARY. 13

mitted ; for which Reason he could not prepare for a general Engagement, because there was no probability that the Action would be of that Nature.

The Encounter then, at *Seneffe*, was an Assemblage of several great Engagements in one Day, with the Column of an Army who, for the most part, shared in the Action, tho' in a succession of different Attacks : For the Encounter within, and behind the Village of *Seneffe*, had not any Conformity, either with Relation to the Ground or the Troops, to that which happen'd not only on this side, but within, and above the Village of *St. Nicholas* in the Wood ; nor had this any similitude to the Action in the Hop-Grounds and Village of *Fays*.

This Encounter therefore of *Seneffe*, may be considered as three great Actions performed, in the same Day, against different Troops, and in different Places ; but still against the Columns of the same Army in their March, and for the most part, by the same Troops, who were incapable of forming one entire Front, at once, and could not all engage in any other Situation.

I make this Comparison between these two great Encounters, to shew that the infinite variety of Situations, produce an Infinity of different Dispositions, and different Expedients for a fortunate Event.

In

The Encoun-
ter at Zintz-
heim, 1674.

In the same Year, 1674, Marshal *Turenne* had a great Encounter at *Zintzheim*, wherein he gain'd all the Advantage. This General, while the King was pursuing his Conquest of the *Franche-Comté*, before the Opening of the Campaign, had assembled part of his Army in the Upper *Alsace*, to prevent the Imperialists from marching a Body of Troops, through the Frontier Towns, into the *Franche-Comté*, to interrupt the Progress of the King's Arms. The Enemy perceiving, by this Disposition, that it would be in vain for them to attempt the Relief of this Province, drew together a considerable Party of Forces, who encamped above *Zintzheim*, and had this little Town in the Front of their Camp, in which there was a hollow Way, that cover'd the Camp to the Right, beyond the Town.

M. de Turenne prepared his Troops for a long and expeditious March, from the Upper *Alsace* to *Philipsburg*, whilst the Enemy ne'er suspected that Motion, and had no Apprehensions of any Danger in their Camp at *Zintzheim*. He past the *Rhine* at *Philipsburg*, drew out of that City a Body of Foot, who were posted there, and marched all Night to *Zintzheim*, where he arrived early in the Morning, in sight of the Enemies Camp. This General made the proper Dispositions for an Attack, when he had survey'd the
Si-

HISTORICAL *and* MILITARY. 15

Situation of the Camp, and the Posture of the Enemy, who taking it for granted that *M. de Turenne* would be obliged to attack the Town of *Zintzheim*, and make himself Master of it, before the Horse could be capable of Engaging, imagined their own Post to be impregnable. And yet *M. de Turenne* having ordered the Foot to advance towards the Town, left a small Body there, to amuse the Enemy in Front, and then filing off, thro' the hollow Way, the Bottom of which was not visible from the Town, he posted himself at the Head of the rest, on the Enemy's right Flank, who were soon thrown into Disorder, and obliged to make a distant Retreat from that hollow Way, which could not be accomplished without changing their Disposition, This Motion gave *M. de Turenne* Time to draw up his Horse, who were protected by the Fire of the Foot; and in the Interim the Town of *Zintzheim* was taken.

M. de Turenne, in Consequence of this Advantage, extended his Front between the Town and the Enemies Line, which being formed on a higher Tract of Ground, they declined marching, that they might not lose the Benefit of their Situation. But *M. de Turenne* advanced up the Ascent to them, and after several Charges, they were entirely defeated, and lost the greatest part of their Foot,

with a considerable Number of their Horse, and their Baggage.

Two Particulars may be learnt from this Example. One, that a Body of Troops is not in any State of Security, when they are separated, by a great River, from the Enemy who enjoys the Conveniency of a Bridge; for they will be always unacquainted with the Motion that Enemy may be capable of forming, in order to facilitate a secret Approach: for which Reason, their true Distance from the Enemy, ought to be only computed from the River to their own Camp; since he can easily advance to the Banks, and conceal his March from them. The General, therefore, who commanded in the Camp at *Zintzheim*, ought not to have imagined himself at any greater Remove from *M. de Turenne*, than six Leagues, which are the Distance between *Zintzheim* and *Philipsburg*. The second Reflection which is obvious from this Instance is, that a Body of Troops who are at a reasonable Distance from an Enemy, who can advance to them without discovering his Forces in their March, ought never to wait for his Approach, in Confidence of the seeming Advantages of their own Situation, which can never be any Equivalent for the Superiority of the Troops, by whom they may happen to be attacked, and of whose exact Number they can never be certain.

All

HISTORICAL *and* MILITARY. 17

All these extraordinary Actions, which I have thus described, are only to be considered as great Encounters, whose advantageous Events established the Superiority of the Campaign, which, as I have observed, is the first Species of great Actions in War.

In the same Year 1674. M. de Turenne, who by his Success in the Encounter at *Zintzheim* had gain'd an Equality with the Enemy, fought the Battle of *Hinsheim*, in the beginning of October; and this was the first regular Battle I ever saw.

This General had encamped at *Wantznaw*, and his Army was almost equal in Number to the Emperor's, which was commanded by the Prince of *Bournonville*, whose Camp was at *Hinsheim*, where he expected a considerable Reinforcement of Troops from the Elector of *Brandenburg*, whose Conjunction with his own, would, in a little time, have render'd his Army much superior to the King's. It was necessary therefore, to prevent, by some fortunate Action, the Consequences of that great Inequality, or else M. de Turenne would have found himself oblig'd to abandon all *Alsace*, at a Season not sufficiently advanced, to make him turn his Thoughts to Winter Quarters. He had no Expedient to save *Philipsburg*, or *Brisac*, but by giving Battle to the Prince of *Bournonville*,

The Battle of
Hinsheim,
1674.

ville, before he could be join'd by the Elector of *Brandenburg*. *M. de Turenne* being thus necessitated to come to an Engagement, marched from *Wantzaw*, to attack the Enemy at *Hinsheim*. The Prince of *Bournonville*, in all probability, would not have had sufficient time to form his Army in Order of Battle, at the Front of his Camp, had it not been for a continual Fall of Rain, which retarded the March of our Troops, and swell'd a little Rivulet, which flowed near the Front of the Enemy's Camp, to such a Degree, that we were obliged to cast a Bridge over it in the Night. But these Inconveniencies prevented the King's Army from compleating their Passage over the Stream, till Break of Day, and favoured the Enemy with an Opportunity of ranging themselves in Array, with their left Wing supported by a little Thicket, in which the Prince of *Bournonville* posted a Body of Foot, and some Pieces of Cannon; the Right Wing extended along the Plain.

M. de Turenne advanced to the Enemy, in a regular Order of Battle, and the Action was begun by the whole Front of the Army, about eight in the Morning, in a dreadful Storm of Rain, and on a soil so impregnated with Water, that it was extremely difficult, both for the Horse and Foot, to march near enough to begin the Attack.

The

HISTORICAL *and* MILITARY. 19

The Success of the first Charge was different in the Front of the Line. The Left of the first Line of Horse, in the King's Army, was overwhelmed by the Enemy's Right, but was soon sustain'd by the Advance of the second Line, which obliged the Enemy to quit the Ground they had gain'd on our First, which had now time to rally in good Order.

The Center of Foot, in the King's Army, pressed strongly upon the Foe, tho' without any considerable Advantage; for they durst not advance too far, because of the Disorder on our Left, which as yet had not compleatly rallied, and likewise, on Account of the Rain, which prevented them from using their Muskets; for the Foot, at that time, were not armed with Fuses.

The Right of our Horse maintain'd their Ground, against all the Musket and Cannon Shot which play'd from the Wood that supported the Enemy's Left, till M. *de Turenne*, after he had repaired the Disorder of his Left, caused the Wood to be attack'd by all the Foot who compos'd his Body of Reserve, and who dislodged the Enemy, after a long and obstinate Resistance. The Protection therefore, which the Enemies Left had, at first, from the Wood, became, in its Consequence, the Support of our Right, and lost the Enemy much Ground in the

Front of the Field of Battle; till at last, the Fatigue sustain'd by the Men and Horses, and the watry Soil on which they engaged, made it impossible for all the Line to advance, in order to render the Battle decisive. The approach of Night gave the Troops an Opportunity of recovering a little Breath; but tho' the Rain had ceased about Nine, the Enemy, finding themselves befriended by the Darkness, left the Field of Battle and some pieces of Cannon, and retired near *Strasbourg*, to be out of the reach of *M. de Turenne*.

This Action, tho' not entirely decisive, gave *M. de Turenne* the Reputation of Superiority, for some Time, and kept the Enemy inactive, till the Arrival of their Succours.

This Example therefore justifies my Maxims, and makes it evident that the Resignation of the Field of Battle, tho' without any great Loss of Men, frequently produces more considerable Advantages, than the severest Engagements which are undecisive. For no Battle ranged in regular Array, and in which the whole Front charged at the same time, was ever less decisive than this of *Hinsheim*, tho' the Field was abandoned, or ever produced a more evident Effect.

The Encoun-
ters at *Mulbau-*
sen and *Colmar*.
1674.

At the close of the Year 1674, and the beginning of 1675, the Success of *M. de Turenne*, in the Encounters of *Mulhausen* and *Col-*

mar,

mar, against the united Forces of the *Emperor*, and the Elector of *Brandenburg*, give me an excellent Opportunity of reflecting on the Circumstances by which those great Events were conducted.

After the Conjunction of the Elector of *Brandenburg*'s Forces with those of the *Emperor*, the Enemy had sixty Thousand Men in their Army; so that *M. de Turenne*, who had not twenty Thousand effective Men, was no longer in a Condition to dispute the Possession of the Plains of *Alsace*, with the Foe; but was only attentive to leave a Body of Foot in *Philipsburg* and *Brisac*, sufficient to secure them from any Apprehensions of the Enemy's undertaking the Siege of those Places, in that advanced Season. After which he retired with the rest of his Army, through *Savern*, into the *German Lorrain*, where he disposed of his Troops in good Quarters, to refresh them after the Fatigues of their long Campaign; and seem'd to turn all his Thoughts to Tranquillity, in order to induce the Enemy to follow his Example, This feign'd Repose cover'd the March of those Troops who were detached from the Army in *Flanders*, after the close of the Campaign in that Country, and who only appear'd in Motion, in order to take Possession of Winter Quarters in *Lorrain*, and to secure that Province, which was threaten'd by a

great Army the Enemy then had in *Alsace*.

The Enemy, whose Numbers freed them from all Apprehensions of M. *de Turenne's* Army, and who imputed the March of the Troops which came from *Flanders*, to an Effect of the King's Precaution against their Designs in the next Campaign, were not at all alarm'd at that Motion: And as they judged the Season too far advanced, for them to undertake the Siege of *Brisac*, which they might have accomplished with the greatest Ease, they dispersed themselves over all the flat Country of *Alsace*, in a full persuasion that M. *de Turenne*, who had a Ridge of Mountains to pass, before he could come up with them, would not think of assaulting them in their Winter Quarters, during the Severity of that Season: They were stationed in such a manner, that they blocked up *Brisac* and *Philipsburg*, with an Intention to form the Siege of those Places at the beginning of the Spring; and before M. *de Turenne* could have had an Army capable of opposing the Execution of their grand Projects. They had, at least, sixty Thousand Men, and imagined the King would not be in a condition to furnish M. *de Turenne* with an Army strong enough to raise those Sieges, because the Prince of *Orange* would find him sufficient Employment in *Flanders*. From whence they concluded, that as soon as they had

HISTORICAL *and* MILITARY. 23

had compleated their intended Conquests in *Alsace*, it would be easy for them to penetrate into *Lorrain*, and the *Franche-Comté*, where they knew their Presence was desired by the Inhabitants; and that they should have no difficulty to fix the Seat of War on the *Moselle*, and the *Maes*, and even in the Province of *Burgundy*.

This was the Enemy's Plan for the Year 1675; but it was intirely disconcerted by M. *de Turenne*, in a few Days, without any Loss, and with a reach of Genius worthy of that great Man.

The Troops being all arrived from *Flanders*, and those of the Army in *Germany* refreshed from their Fatigue; M. *de Turenne* assembled all his Forces, and marched up to the Passes of *Tanns* and *Bedfort*, without alarming the Enemy; because this General had caused it to be given out, that his Troops were in Motion, with no other View than to possess themselves of Winter Quarters in *Burgundy*, and the *Franche-Comté*, after he had received Intelligence that the Enemy were distributed into theirs.

These Motions, covered with the plausible Pretext of providing Winter Quarters, in *December*, for an Army who had been employed in the Campaign, ever since the Month of March, caused the Enemy to continue quiet in their Quarters: While M. *de Tu-*

renne, having marched his Forces over the Mountains covered with Snow, and through *Tanns* and *Bedfort*, advanced into the Middle of the Enemy's Quarters, at a time when they had not the least Suspicion of such a Visit.

At *Mulhausen* he defeated those Troops who were preparing to put themselves in Motion, in order to join, and form a Body. He had likewise made another Party Prisoners of War, and then marched to *Colmar*, where the Elector of *Brandenburg* had fixed his Head Quarters, and where all the Princes and Generals of the Enemy's Forces were lodged, and had met together to celebrate the Epiphany, without the least Expectation of *M. de Turenne's* Arrival to incommode their Festival. The Consternation created by the Surprise and Destruction of their Quarters at *Mulhausen*, so affected these Princes and Generals, that they had but just time to abandon that Town, a Moment after they had placed themselves at Table; and to make good the Passage over the Rivulet that flows by *Colmar*, till the Princes who were in the lower Quarters, had an Opportunity of making their Escape towards *Strasburg*, and re-passing the *Rhine* at that City. The Severity of the Season, and the Banks of the Rivulet which were but half frozen, so extremely harraressed our Troops, that they were inca-

HISTORICAL *and* MILITARY. 25

incapable of attacking the Enemies who were posted along that Stream, with vigour enough to become Masters of the Pass, before Night; which preserved part of the Enemies Army and the Baggage, which had been deposited in *Colmar*. These Forces, in the course of their general Flight, were obliged to repass the *Rhine*, in order to procure themselves other Winter Quarters in *Germany*; and to abandon, in this Manner, the mighty Projects they had proposed to execute the ensuing Campaign.

This Example effectually demonstrates the great Advantages which result from an Action seasonably accomplished; tho' the Loss of Men was very inconsiderable on this Occasion, the Reputation acquired by a successful Event, is frequently sufficient to give a General the Superiority over his Enemy, when even the Troops of that Enemy are much more numerous than his own.

Any General but *M. de Turenne*, would have been contented, in such a Conjunction as this, with the Advantages he had obtained over his Enemy, during the ordinary Course of a Campaign; and thought he had sufficiently established his Glory, by supporting himself with Equality, and, much more, with Superiority, against an Enemy who was always stronger than himself: But this was not an adequate Portion of Honour for so
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great a Man as *M. de Turenne*, who foresaw the Loss of *Alsace*, in the succeeding Campaign, in consequence of the Retreat he had been compelled to make from thence. He never could have re-enter'd that Province, to preserve the fortified Places for the King, if he had waited for the usual Season of opening Campaigns; because he never could have marched his Army in Front, through the Defiles in the Mountains, against an Enemy, who would have been stationed there, to oppose him, and would have rendered it impossible for him to form his Troops into regular Order, at the Foot of those Mountains. It became necessary therefore, to dislodge the Enemy, at a time which is generally devoted to the Repose of Armies; and to make them abandon the Quarters wherein they imagined themselves securely fixed. This was the very Conduct *M. de Turenne* pursued, in the Execution of a Project so judiciously conceived and digested, and accomplished with such uncommon Patience. He considered every Circumstance of his Plan with the coolest Deliberation of Thought, and with all the Capacity imaginable brought himself into a Condition of compleating, what he had premeditated with so much Judgment and Ability. He waited, with all the calm Perseverance of Temper, for the Arrival of the happy Moment for Action; and

HISTORICAL *and* MILITARY. 27

and at last, with a surprising Promptitude and Vivacity, effected a Scheme concerted with Caution, adjusted with Prudence, and conducted to the Period of its Execution, with all the Address necessary to cover his Design, and with all the Dexterity that a superior Genius can be capable of exerting.

This is the amiable Model, and these are the great Examples, to which a Man devoted to War, ought to have Recourse for the noblest Subjects of his Meditations; for he will discover, in this single Action of *M. de Turenne*, every Circumstance which a great Captain can possibly conceive in the justest Manner, when he has reflected on the present and future State of the War confided to his Conduct; he will observe every skilful Particular which can be concerted by the finest Imagination, to conceal an important Design from an Enemy; together with each Expedient that can result from Judgment and Activity, for the Completion of a Plan, form'd by a Maturity of Thought, and judiciously pursued to the Point of its Execution.

The Year 1675 will furnish me with Reflections on the Battles of *Altenheim* and *Con-sarbrick*.

The Marshal *de Turenne* received his Death by a Cannon Shot, at the Instant that he was

The Battle
of *Altenheim*
1675.

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preparing to engage the Enemy, who were drawn up in Order of Battle, opposite to the Village of *Sasback*; the King's Forces, who then sustain'd the Loss of this great Commander, continued in the same Situation in which they were ranged at that melancholy Moment: I mean, that their Left and Center were disposed in Order of Battle, on the Spot which the Troops were to possess in their Advance to the Enemy; and that the Right was in Motion to compleat the Front, but was not as yet arrived. The Death of *M. de Turenne*, which happened at an Instant so fatal to the Army, created a Disagreement in Opinion, between *M. de Lorge* and *M. Vaubrun*, the two Lieutenant Generals who served under *M. de Turenne*; so that the Troops to the Right, who were then upon their Hault, did not compleat their March, in order to range themselves in Front to the Left Wing of the Center. *M. de Lorge*, as the older Officer, insisted on the sole Command of all the Army: *M. Vaubrun*, on the Contrary, pretended that the Command of the whole Army ought to be divided between them, till the King had nominated a Superior. This Gentleman founded his Pretensions on the Parity of Rank, and the Indecision of military Stations, in a Conjunction of that Nature; and

and he alledged several Instances, where Generals of equal Rank had agreed to share the Command alternately. M. *Vaubrun* had, however, in his Disfavour, the memorable Precedent of the Marshals *Crequi*, *d' Humières* and *Bellefonds*, who had obeyed M. *de Turenne*, in the Year 1672. This last General founded his Claim on the Quality he held, as Marshal of the King's Armies and Camps; and his Competitors, without assenting to that Title, which was then a Novelty in *France*, submitted to receive their Orders from him, as the oldest Officer; and his Majesty was not pleased to explain the Manner in which such Competitions were to be decided for the future. Since that Time indeed, the King settled the Pretensions for Command between the General Officers, in Favour of the Oldest in Parity of Rank.

This was the Subject of Dispute between Messieurs *de Lorge* and *Vaubrun*, which had almost occasion'd the Loss of the King's Army, from the Death of M. *de Turenne*, to the Death of M. *de Vaubrun*, who was killed in the first Attack on the Left, in the Battle of *Altenheim*.

M. *de Montecuculi*, who had immediate Intelligence of the Death of M. *de Turenne*, by a German *Valet de Chambre* who waited on M. *Boufflers*, and who deserted to give him that Information, made no Efforts to
im-

improve the Effect which the Death of that General might have produced, and which became obvious to him, by the Halt of the Right Wing, which did not form it self in Order of Battle, as I have already intimated.

This General imagined himself posted on a Tract of Ground very advantageous for sustaining an Attack, and had no Inclination to lose the Benefit of such a Situation, by engaging with an Army, which, upon the Completion of its Arrangement in Order of Battle, would have been possessed of a small Eminence, which commanded the Extent of the Rivulet that fronted the Right and Center of the King's Army. For which Reason he thought it more advantageous to the Emperor's Affairs, in that Conjuncture, to oblige his Majesty's Forces to repass the *Rhine*, and to reinstate the Seat of War in *Alsace*; whereas *M. de Turenne*, some little time before, had not only prevented his Entrance into that Country, but was ready to make him repass the *Necker*, or oblige him to come to an Engagement against his Inclinations. *M. de Montecuculi*, therefore, in order to accomplish his Designs, detached, the next Day after the Death of *M. de Turenne*, the Horse which form'd the Left of his Army, under the Command of *M. de Caprara*, who pursued his March over the Moun-

Mountain, in the View of the Right of the King's Army, and advanced towards *Offenburg* and *Wilstat*, where we had left a Body of Foot to guard our Convoys of Bread, which could not arrive at the Army, except by the way of *Alsace*, and the Bridge of *Altenheim*.

This first Motion of M. *de Montecuculi* convinced our Generals, that if M. *de Caprara* should make himself Master of our Bridge at *Altenheim*, or only destroy one of our Convoys, the King's Army would sustain a very fatal Risque on the other side of the *Rhine*. For which Reason this formidable Inconvenience brought M^{rs}. *de Lorge* and *Vaubrun* to agree for some time to command alternately, till the Arrival of Orders from Court; and they came to a Resolution that the Army should march, the next Night, to *Altenheim*, with all possible Expedition.

This long March, begun in the Night, and under the Conduct of Generals in whom the Army reposed but little Confidence, was not performed with all the Order requisite in such a Motion. In the mean time, a great Storm, which rose at the beginning of the March, cover'd us from the View of the Enemy, who were unacquainted with our Proceeding, till the break of Day, when they received

received Intelligence of it from their advanced Guard; so that the greatest part of the Army had passed the little River which runs by *Acheren*, before the Rear-Guard, which consisted of a Body of Foot, who were ordered to draw up the Bridges of that River, could be overtaken by the Dragoons and Croats detached by *M. de Montecuculi* to fall upon the Rear of our Army.

In the mean Time *M. de Montecuculi* put all his Army in Motion, to pursue us in our Retreat; but as this General was extremely cautious, and intended to bring up all his Army together, that he might be in a Condition to ingage his Majesty's Forces, either at the Pass of the *Kintz*, or that of the *Rhine*, at *Altenheim*; and as he was likewise unwilling we should know he was so near us, he always marched out of our View, that we might be less upon our Guard, at the Pass of the Rivers; and indeed we had like to have found his manner of thinking, too judicious for our Safety, as I shall observe in another place. For, in Reality, the Motion of our Army resembled a Flight in the Order of a March, much more than a circumspect and honourable Retreat. When the Front of our Army arrived at the Bridge of *Altenheim*, *M. de Vaubrun*, who commanded that Day, suffer'd those Troops to pass the Bridge, without taking any Precaution to inform him-

HISTORICAL *and* MILITARY. 33

himself, by a Body of Horse who should have been left in the Rear, at some Distance from the Rear Guard of the Foot, how far the Enemy might then be from us.

I should observe, in this place, that it was contrary to all Military Rules, to let a Body of Foot compose the Rear-Guard of the whole Army, in its march from *Saasbach*; for this Party of Foot could not have any Intelligence of the Enemy, beyond the small Extent of their View, and when they arrived at the *Schutteren*, and came up with the Brigade of *Champagne*, which was there station'd to relieve them, and form the Rear-Guard of the whole Army, in their Passage over the *Rbine*; they could not give the Brigade any Tydings of the Enemy whom they had not once seen, since they passed the *Kintz*: so that at the same moment when M. de Montecuculi, at the Head of all his Army, attacked the Brigade of *Champagne*, who were then resting on their Arms, on the other side of the *Schutteren* the greatest part of the second Line had already passed the *Rbine*, and the first was between the *Schutteren* and the Bridge of *Altenheim* in no manner of Disposition for an Engagement, and only upon the Halt, in Expectation of Notice that the second Line and the Baggage had passed the *Rbine*.

The Enemy began with the Slaughter of this Brigade, and had they pursued their Success with a proper Vivacity, our first Line of Foot would never have had time to resume their Arms which they had laid down, or to post themselves along the Bank of the River as they did, without the Order of any General Officer.

The Circumspection of *M. de Montecuculi*, who would not pursue the Brigade beyond the River, before he knew the Disposition on the other Side, gave the first Line of Foot a favourable Opportunity of planting themselves on the Bank, so that when the Enemy's General had extended his Troops into a Line, and advanced to attack the King's Forces, he met with such a brisk Opposition, as made it impossible for him to dislodge them from the Bank of the River.

As the Beginning of this Action was not preceded by any regular Disposition on our Part, and the Troops of the first Line, who had not been conducted by any General Officer, had only posted themselves before the River, where ever they saw the Enemy marching in Front with an intention to pass it, the Line did not extend to the Left, beyond the Front of the Enemy, so that this Body of our Troops did not possess the Ground between the Extremity of the Front which they had in View, and an old Dike of the

Rbine.

Rbine. This Disposition gave the Enemy's Cavalry to the Right, an Opportunity of wheeling a Hundred Horse upon the Rear of our first Line which sustain'd the Efforts of the Enemy in their Front. This Body of Horse had a long Engagement behind the Foot of the first Line, who were obliged to make the two last Ranks of the Battalions face about, in order to fire upon that party of Horse. During the Continuance of this Action, the four Ranks of the Front defended the Bank of the River, against the Enemy's Army, who advanced five times, in two Lines, within a Pike's length, without gaining one Foot of Ground upon the Foot. At last our Horse, who were posted to the Right, finding no Employment from the Enemy's Left, wheel'd off from that Situation, and charged their Horse who were engaged between our first Line and the Bridge, and entirely cut them to Pieces; because there was now no Possibility for them to make their Retreat, except by the Dike from whence they had advanced, and which was very happily possessed by one of our Battalions. The Enumeration of these Particulars makes it evident that this Body of the Enemy's Horse prevented, for a considerable Time, the Troops of our second Line, who had repassed the *Rbine*, from drawing up behind the first.

36 MEMOIRS

This Situation of Affairs continued for several Hours, till the Destruction of the Enemy's Horse, in the manner I have related, opened a Passage for our Troops of the second Line; which, however, was not accomplished till six in the Evening. The Enemy's Attacks in Front, in Order to force the River, lasted till Night, tho' without Success; and then they retreated from our Troops, to the Distance of a Musket Shot. We afterwards saw them entrenching themselves, and we did the same on our part. *M. Vaubrun* was kill'd in the first Charges that were made to the Left, on the Bank of the *Schutteren*, which was a very fortunate Event for our Army, because they were then united under one General.

This Action furnishes me with several important Reflections on the Subject of this Chapter. The first Incident, which was the Disunion of our Generals, evinces the Necessity of consigning the Command in Chief to one Person, who, in case of Death, should be succeeded by the oldest Officer. For the Competition between *M. de Lorge* and *M. Vaubrun*, for the Command in Chief, or the alternate Enjoyment of it from Day to Day, was the only Cause of the continuance of our Troops three entire Days, in Presence of the Enemy at *Saasbach*, without any Care to form our Right in order of Battle,

or

or to fix any Resolution either for an Engagement or a Retreat.

This Disunion between Chiefs of equal Authority, was the Circumstance which occasioned the disorderly Retreat of the Army from *Saasbach* to *Altenheim*, for the space of three Days, in all which Time, no Measures were taken to gain Intelligence of the Enemy's Motions, nor was there so much as a Party of fifty Horse commanded to be at a reasonable Distance from the Rear-Guard of the Foot, to give Information of what passed out of the View of the Army; which Omission made it impossible for that Rear of Foot, which was never changed in all the March from *Saasbach* to the *Schutteren*, to give any account of the Enemy's Forces, when they came up to the Brigade of *Champagne*, which ought to have composed the Rear-Guard of the Army that passed the Bridge of *Altenheim*: This Omission likewise occasion'd that Brigade to be resting upon their Arms, when they were attacked and defeated by the Enemy's whole Army. I may add too, that this Disunion caused *M. Vaubrun* to pass the Troops that composed the second Line of the Army over the *Rhine*, as fast as they arrived, without acquainting *M. de Lorge* with that Motion, or even knowing at what Distance the Enemy then was from the King's Army;

of which, however, he ought to have had Intelligence, that he might have judged whether it was consistent with Safety, to leave part of the Army on the other side of such a River as the *Rhine*, without taking any Precaution for their Security, while the other part passed that River over a single Bridge.

The second Reflection to be made on this Event is, that the Troops, in that Conjunction, were commanded, in a more judicious manner, by the private Officers, than they have been in the whole Course of the present War. Can there be a more honourable Commendation of the Bravery of the Troops, and the intrepid Conduct of the several Officers, than by comparing what has been transacted on great Occasions, in this War, with the gallant Action at *Altenheim*, where the View of so imminent a Danger as then threaten'd a whole Line of an Army, whose Rear-Guard had been defeated, only tended to animate the Officers and Soldiers to acquit themselves with Glory, and render their Conduct a Compensation for the Incapacity of the Chiefs? Each Troop devoted all their Attention to the Fight, and were only solicitous to oppose the mighty Efforts of an Enemy superior in Number, and grown presumptuous by their Success in the beginning of the Action; and never expressed the least

Consci-

Consciousness that they were not sustain'd by a second Line.

It can't be said that the King's Army gain'd a Victory over the Enemy in this Battle, since, in Reality, they only preserved themselves from a Defeat; but it certainly may be averred, that this was one of the most glorious Actions, that could redound to the Honour of our Nation; since these Forces, without the aid of a General, and separated from half the Army, sustain'd the Efforts of all the Enemies Troops; continued Masters of the Field of Battle; stript the dead Bodies of their Foes; remain'd upon the Spot where they fought, and forced the Enemy to retire beyond the reach of their Shot, after that Enemy had employed so many ineffectual Endeavours to overwhelm them.

The Action at *Consarbrick*, under the Conduct of M. *de Crequi*, in the same Year 1675, and which happen'd about the same time with that of *Altenheim*, ought to be ranked among the Number of regular and lost Battles, through the disregard of those Attentions capable of crowning a general Engagement with Success.

The Battle
of *Consarbrick*,
1675.

I shall relate the chief Instances of Misconduct which preceded this Action. M. *de Crequi* encamped his Army at a considerable Distance from the Tower and

Bridge of *Confarbrick*, and was, therefore, in no Condition to provide effectually for the Defence of that Tower, which was only guarded by a Lieutenant and twenty Men. He even neglected to station a Body of Troops, in good Intrenchments, near the River, to protect the Tower and Bridge; so that when the Enemy had forced that Tower with their whole Army, and marched their Infantry over the Bridge, M. *de Crequi* was altogether unacquainted with that Motion. This first Omission seem'd to be occasion'd by too much Presumption, and a very unreasonable Contempt of the Enemy, and is really incapable of any Vindication.

The second Failure, was a Neglect to discover that on each side of the Bridge, were two good Fords for the Horse; and which M. *de Crequi* might have render'd unpassable had he known them: But for want of this Precaution, the two Columns of the Enemy's Horse passed the River at these Fords, at the same time that their Column of Foot marched over the Bridge.

A third Neglect was his inconsiderate Choice of a Situation for the Camp, which had a large Defile in its Rear: For if M. *de Crequi* had no Inclination to encamp at a reasonable Distance from the *Saar*, that he might be capable of securing the Bridge over that River, he ought, at least, to have had

HISTORICAL *and* MILITARY. 41

had the Defile in his Front, instead of leaving it in his Rear.

The Faults committed by *M. de Crequi*, on the very Day of Battle, contributed no less to its Loss, than those I have already mention'd. In the first place, he sent his Horse to forrage on the other side of the Defile, before he had any certain Intelligence whether the Enemy, whose Camp was cover'd from his View, by a small Eminence adjoining to the *Saar*, were quiet in their Camp, and not forming any particular Motion. So that when the General received Information, that the greatest part of the Enemy's Forces had passed the Bridge and the Fords, and found himself under a Necessity of recalling the Forragers, the Confusion was so great in the Defile, that the Cavalry could not be drawn up, in a proper Disposition, on the Field of Battle, to which they arrived with their Horses out of Breath. And even this Field of Battle was at such a considerable Distance from the Front of his Camp, that it was already possessed by the greatest part of the Enemy's Forces, who advanced thither with all the Expedition imaginable, after they had passed the River.

I may add too, that the Camp was not sufficiently furnished with Horses to draw the Train of Artillery to the Head of the Line, because most of them had been employed

ployed by *M. de Crequi* in the Conveyance of a Convoy from *Tbionville*. All these Neglects occasion'd the Loss of the Battle and the greatest part of the Infantry, and, afterwards, of the City of *Triers*, which is a remarkable Event that will be related in the Sequel of these Reflections.

Hitherto I have only mention'd the Omissions chargeable on *M. de Crequi*; I shall now bestow a few Observations on the judicious Conduct observed by the Enemy, in order to secure themselves that fortunate Event. Our Enemies, who greatly exceeded *M. de Crequi* in Numbers, intended to form the Siege of *Triers*; and as this City is situated on the *Moselle*, they thought it impracticable to accomplish that Project, while the King's Army remain'd in a Condition to protect that place from one side of the River: For which Reason they found it absolutely necessary to dislodge *M. de Crequi* at a sufficient Distance from *Triers*. This Commander had the two Rivers *Saar* and *Moselle*, to secure him from a general Engagement with an Army superior to his own; but he having, as I before observed, neglected the necessary Precautions, to prevent the Enemy from executing their Project, they judiciously made their own Advantages of his Ommissions, and fixed their Camp very near *Con-sarbrick*, and the Covert of a Curtain which conceal'd

conceal'd their Motions and Disposition. When they became sensible of M. *de Crequi's* Neglect to guard the Bridge, and had received Intelligence that his Horse were gone to forrage, beyond the Defile that was behind their Camp, they so well concerted the Time for marching in three Columns over the *Saar*, and forming themselves in order of Battle, between the River and the Camp, that they effectually succeeded in both those Motions, and defeated M. *de Crequi*, before he had any Opportunity of drawing up his Forces in proper Array.

Our General, however, derived from this unfortunate Battle, one Circumstance which, in the Event, was advantageous to his Glory; since it extinguished, in him, that Presumption which occasion'd his ill Success; and indeed, this great Captain, from that Period to the time of his Death, continually merited the highest Commendations, for the Regularity and Circumspection of his Conduct, in all his bold but judicious Motions against the Enemy, as I shall observe in the proper place. And therefore he will always be justly regarded as one of the greatest Men of the Age, whom the Misfortune of that Battle had improved, and render'd capable of those Reflections, which too much Presumption had made him inattentive to, before.

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This Event likewise proves, that a necessary Attention in War, can never be neglected with Impunity, near an Enemy capable of improving that Inconsideration to his own Advantage. For if *M. de Crequi* had not entertain'd that Contempt of his Enemy, which he discover'd in this Campaign, and in Consequence of that Presumption, neglected those Attentions which should have engaged his Thoughts, it is certain that he would not have been defeated at *Confarbrick*, nor could the Enemy have succeeded in their favourite Design on *Triers*, where they made *M. de Crequi* their Prisoner, after he had withdrawn to that City, upon the Loss of this Battle.

The Battle
of *Cassel*, 1677.

After the King had taken *Valenciennes*, his Majesty prepared to form the Siege of *Cambray*, and ordered the Duke of *Orleans*, who had under him the *M. d'Humieres*, to invest *St. Omers*. The Prince of *Orange* having not been able to raise, in time, a sufficient Army to relieve *Valenciennes*, and finding it impracticable to march an Army to *Cambray*, in so early a Season, turn'd all his Thoughts to the Preservation of *St. Omers*. This Prince assembled all his Forces at *Ypres*, with an Intention, either to raise the Siege of *St. Omers*, or give Battle to the Duke of *Orleans*, before that Place. The King, who was attentive

tive to the Enemy's Motions, being sensible of their Incapacity to interrupt his Siege, detach'd a Body of Troops from his Army, under the Command of the M. *de Luxembourg*, to reinforce the Duke of *Orleans*.

Upon the Arrival of M. *de Luxembourg*, it was thought adviseable to leave no more Troops before *St. Omers*, than would be sufficient to guard the Intrenchments, and secure the Quarters; and to march with the rest, to the Enemy who had advanced to the hither side of *Cassel*, which was behind the Camp, and who had their Front cover'd by a Rivulet border'd with Hedges, and were drawn up in order of Battle, on a tract of Ground that rose, in a regular Ascent, from the Bank of the Stream, which was guarded by a Party of their first Line of Foot. The King's Army observing the Enemy in this Disposition, advanced to attack the Forces who guarded the Rivulet. The M. *d'Humieres*, who commanded the Right of the Army, engaged his Wing in Action with too much Precipitation, by marching part of his Horse over a Bridge, before the Center and the Left had dislodged the Front of the Enemy's Line, from the Bank of the Rivulet. This hazardous Motion, which separated the Horse on the Right, from the rest of the Army, had not the intended Effect; for the Troops were charg-
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ed by all the Horse of the Enemy's Left, and were even exposed to the Fire of the Foot; so that they were obliged to repass the Bridge in great Disorder, and with a very considerable Loss. But as soon as this Disorder was repaired, and the Right Wing reinstated in a proper Disposition, on this side of the Bridge, the Effort for passing the Rivulet became general, through the whole Front of the Line. The Duke of *Orleans* in the Center, and *M. de Luxembourg* on the Right, clear'd the Bank of the Troops who guarded it, and all the Front passed the Brook, almost at the same time; upon which the Enemy quitted the Field of Battle, and were pursued beyond *Cassel*.

From this Account of the injudicious Motion of our Right, it becomes manifest that when two Armies are preparing to charge, if the Front should not happen to be entirely free and disengaged, that part of it which is not free, must be attacked equally, and at the same time that the Assault is carried on against the other part which is disengaged; because the Success of an Attack upon those Troops of the Front who are free, gives the Army an Opportunity of possessing the Ground quitted by the Enemy; either by extending it self in such a manner as to be no longer obliged to engage with the difficult part of the Front, or by

by wheeling round, or falling upon the Flank of the Enemy who are too well posted to be attacked on the Front. It was therefore a great piece of Misconduct in the *M. d' Humieres*, to engage his Right Wing with so much Precipitation, before the Center and the Left were in a condition to sustain the Right; part of which had passed the Bridge over the Rivulet, and consequently was separated from the Army, before the Line was sufficiently form'd, to make an equal Effort through the whole Front of the Army.

The Misconduct of the Prince of *Orange*, which decided the Battle in his Disfavour, was the bad Disposition of his Army for an Engagement. I have already observed that the Ground on the Enemy's side, ascended from the Rivulet, which in some places was more or less guarded by Hedges. The Prince of *Orange*, who advanced with an Intention to give Battle, for the Relief of a Town, ought really to have given and not received it. He ought to have disposed his Forces in such a manner, that they might have been capable of making powerful Efforts to pass the Rivulet, instead of contenting himself with guarding it; or, at least, it was incumbent on him to have prevented the King's Army from passing it.

This was such a Conduct as Reason should have inclined him to pursue, and yet he had
recourse

recourse to very different Measures, which lost him the Battle. His first Line was drawn up on the middle height of the Ascent, so that he could only sustain the Bank of the Rivulet, by Troops detached from that Line, who, when they were chased from the Bank, could no longer replace themselves in the Vacancies of the first Line, which was then charged by the entire Front of our Forces, who were form'd in Order of Battle, on the other side of the Rivulet, the Moment they had clear'd it of the Foot who had been detached to guard it; and which Front of our Army was sustain'd by the second Line, that advanced to the Rivulet. The Enemy's first Line therefore, being repulsed from their Station, our second Line had an Opportunity of passing the Stream, and then marched with the first, to attack the Enemy's second Line, which by a vain Endeavour to preserve a Situation of Ground, that exceeded ours in Height, had retired too far from the first, without so much as leaving it a proper Extent of Ground, to rally behind the Troops of that second Line, while they sustain'd the Charge from our two Lines. The Troops, therefore, of the first Line, not finding any commodious Ground where they might form themselves in Order of Battle behind the second Line, continued their Flight, and render'd the Charge which the second Line was

was preparing to make, altogether insignificant to attempt, and communicated the Disorder and Confusion to the whole Army.

M. de *Luxembourg* had observed, before the Battle began, that the Prince of *Orange* disposed his Troops in the manner I have described; to cover a Motion he intended his Right Wing should make, in order to seize the Fort of *Walte* above St. *Omers*; which would have enabled him to relieve that Place. This Design, which M. de *Luxembourg* had the Penetration to discover, obliged him to bring our Left Wing and Center, immediately into the Engagement; without which Precaution the Prince of *Orange* would have relieved St. *Omers*, and not hazarded an Engagement. This Battle may be ranked in the first Species of great Actions, because the two Armies were drawn up in regular Array, and almost charged through the whole Extent of their Fronts.

The Year 1678. furnishes me with another Example, in the Battle of St. *Dennis*; which had

The Battle
of St. *Dennis*,
1678.

that Name for no other Reason, than that the two Armies confronted each other in order of Battle; for, in Reality, it was only a great Encounter at the Abby of St. *Dennis*, and near the Farm of *Casteau*. Both Armies were no more than Spectators of the Action all that Day, because it was im-

possible they could come to a general Engagement, since their Approach was prevented by the Brook of *St. Dennis*, which flows between two Eminencies, that leave very narrow Tracks of Land at the bottom, and which are inaccessible through their whole Extent.

It was thought, and with some appearance of Reason, that the *Spaniards* had prevailed upon the Prince of *Orange*, to disconcert, by some happy Event, the Peace which the *Dutch* had just signed at *Nimeguen* with *France*, before it could be signed by the *Spanish* Plenipotentiaries; and it has been affirmed, that the Prince of *Orange* had Intelligence that the Peace was signed, before he began the Engagement; which seems the more probable, since M. de *Luxembourg* received the Advice of that Transaction from Mons. *d'Estrades*, to whom it was communicated by the Marshal *d'Estrades*, his Father, who was his Majesty's first Plenipotentiary at the Congress of *Nimeguen*, and was then carrying the Treaty to the King.

If an Intention to disconcert the Peace, induced the Prince of *Orange* to attempt a general Engagement between the two Armies, it may be said, that he did not form his Measures like an experienced Commander; for it is easy to judge by my Description of the Situation wherein the two Armies

were

were then posted, that it was absolutely impossible for them to come to a general Action, had they been equally so disposed: Because neither of them would lose the Advantage of their Post, to file off towards an Enemy, who was stationed on an Eminence, rising from the Brook of *St. Dennis*, which separated the two Ascents on which the Armies were drawn up in order of Battle, as I have intimated before. The Prince of *Orange* therefore, could not, with relation to a general Engagement, expect any Success capable of disannulling the Peace that had been signed; for had he been able, at *St. Dennis* and *Casteau*, to have totally dislodged the Body of Foot who were posted on this side of the River, towards *St. Dennis*, as well as the other Party who guarded the Defile by the Mill that was seated at the Bottom, and below the Farm of *Casteau*, it would, even then, have been impossible for him to have gained the Eminence where the King's Army was drawn up, and from whence they protected the Foot, who sustained the Action on the Edge of the Brook: And consequently it would have been impracticable for him to dislodge that Body of Foot, or gain from them one Inch of the Ground they were to maintain.

It was very improper Conduct, therefore, in the Prince of *Orange*, to sacrifice such a

Number of Men with the View of a general Engagement, in a Situation that was not accommodated to an Action of that Nature.

Some Persons who are disposed to be more favourable to the Prince of *Orange*, and would censure *M. de Luxembourg*, for fixing his Quarters near the Abby of *St. Dennis*, and separated from the Army by the Brook, have declared, that the Prince of *Orange* approached the King's Forces, not with an Intention to disconcert the Peace by any Engagement whatever, but only to raise the Blockade of *Mons*. But what I have now to offer, will easily make it evident that no such Project was then formed by that Prince.

M. de Montal had formed the Blockade of *Mons* for a considerable Time, with a large Body of Troops disposed in Quarters round that Place, and *M. de Luxembourg* had received Orders to support that Blockade with the Army he commanded: For which Reason it is very obvious, that the Prince of *Orange* must have imagined, that when he approached *Mons* with his Army, *M. de Luxembourg* would likewise advance with his Forces, to protect the Troops that form'd the Blockade. These Motions were accordingly made: The Prince of *Orange* encamped at *Soignes*, and *M. de Luxembourg* on the Heath of *Casteau*. When the Prince advanced from *Soignes*, towards the King's Army, he passed through

through the *Ræux*, into the Plain that lies between the Mill of *Ræux*, and the Abby of St. *Dennis*; so that on the one Side, he had the *Haine* between his Army and the Troops employed in the Blockade, and the River of St. *Dennis* between his Army and that of M. de *Luxembourg*; consequently his March was not formed with any Design to raise the Blockade of *Mons*, by a general Engagement, which was impracticable in any Place but the Plains of *Binche*, and after crossing the *Haine* out of the Reach of the King's Army. The Prince of *Orange*, therefore, when he attacked the Abby of St. *Dennis*, could not have any Intention either to raise the Blockade of *Mons*, or to draw the Armies into a general Engagement.

It must be granted, that when M. de *Luxembourg* fixed his head Quarters at St. *Dennis*, in the manner I have represented, he departed from the Rules I have laid down for securing the head Quarters of an Army; and might be taxed with Inconsideration in that Particular, had the Prince of *Orange* dislodged him from those Quarters. But let us even suppose, that when this Prince marched into the Plain above the Abby, he had discovered the Tents of those Troops who were encamped likewise above the Abby, and knowing them to be separated by the Brook from the main Body of their Army,

should have had an Intention to attack them in that Situation, he would yet have been frustrated in that Purpose, at the Approach of the Camp which was raised by the Order of *M. de Luxembourg*, who quitted his Quarters the Moment the first Troops of the Enemy passed through the Defile of *Rœux*. It is certain, that the Troops which covered the head Quarters, had all decamped for the space of four Hours, and repassed the Brook when the Engagement began; and the Enemy could not be unacquainted with that Motion, since it was performed in their View, and in full Day-light. My Persuasion of this Truth is the stronger, because I commanded this Camp that was separated from the Army to cover the Head Quarters, and personally sustained the Action at the Abby of *St. Dennis*; which may therefore be said, to have been only occasioned by the Mortification the Prince of *Orange* received, when he saw the Peace concluded, at a time when he wished for the Continuance of the War; or else it sprung from a Design to blend Troubles with the Peace, by an Action which, however, could not produce any decisive Event, in the Circumstances by which the Prince proposed to accomplish it. But if *M. de Luxembourg* had really left this Body of Troops on the other side of the Brook, and tho' they had been entirely destroyed by
the

the Enemy, they would have gained nothing more by that Advantage, than the meer Satisfaction of ruining five Battalions, and one Regiment of Dragoons on the very first Day of the Pacification, which would not have conducted the Prince of *Orange* to a general Engagement, nor even gained him the inconsiderable Glory of having raised the Blokade of *Mons*.

The Year 1689. supplies me with another Instance of an Encounter, tho' I am really at a Loss to know in what Species of Military Actions I ought to rank it; and this was the Encounter at *Walcourt*, which was fought by a Body of Foot opposite to the Walls of this little Town. The King's Army was commanded by the Marshal *d'Humieres*; but I have no instructive Reflection to make on this Action, except this; that it ought never to be cited but with a View to discountenance any future Imitation of such a Conduct.

The Encounter of *Walcourt* 1689.

The Year 1690 will furnish me with useful Reflections on the Battles of *Flerus* and *Stafarda*, which belong to the first Species of great Actions; because the Armies were disposed in order of Battle when they began to charge, and they engaged through the whole Extent of their Fronts; tho' with Circumstances so very

The Battle of *Flerus* 1690.

different, as to make it thought that two Battles can never resemble each other in every Particular ; and that those who would render themselves perfect in the Knowledge of War, ought to have Recourse to History, and the Relations of others, for Instructions on this Subject, which they cannot sufficiently derive from their own Experience.

As I have already related the Circumstances which preceded the Battle of *Flerus*, when I discussed the Subject of the foregoing Chapters; I shall confine my self solely to the Article of this, which is Battles; and hope to make it evident that *M. de Luxembourg*, by his Superiority of Genius over *M. de Waldeck*, compleated the Decision of that great Battle; the Success of which was owing to the seasonable Time in which *M. de Luxembourg* ordered the left Wing of his Horse to form a Motion, of which the Enemy could have no Knowledge, because it was entirely effected out of their View, tho' it happened to be made very near them. This was such a masterly Expedient, as could only be conceived by a truly great Man, whose admirable Penetration could single out the critical Moment for directing such a Motion, and concealing it from the Enemy's Observation; For it would have been too hazardous to have attempted it, had the Enemy discovered his Proceeding.

M. de

M. *de Waldeck* had drawn up his Troops on a Track of Land which rose a little to his Right, and form'd a Slope on the Reverse, which was unobserved by the Extremity of his Right Wing, and continued in an easy Declivity to the Level on which M. *de Luxembourg* was marching to his Enemy. When the Front of the King's Army arrived at the Place where this Elevation was high enough to conceal the Left Wing of our Horse from M. *de Waldeck*, in the Continuation of their March; it was then that M. *de Luxembourg* improved the important Moment, with a surprizing Capacity, and ordered M. *de Gournai*, a very expert Officer of the Horse, to take the Advantage of that Reverse, which prevented the Enemy from discovering the Motion he was to pursue, and to pour all the Left of his Horse upon the Enemy's right Flank, with a particular Caution to order his March so, that the Right of his Left might rejoin the Left of the Foot, at the Instant they were preparing to charge the Front of the Enemy's Foot.

This Motion, which would have proved so hazardous, had the Enemy discovered it, but which happily decided the Battle in our Favour, was executed with a Capacity equal to the Judgment that formed it: All the Left Wing of our Horse was disposed into a kind of Rectangular Form on the Flank of the
Enemy's

Enemy's Right Wing, tho' they extended to our Line of Foot. And thus the Enemy beheld themselves assaulted in Flank, by a Front equal to that which they possessed. When they therefore found their Right charged in Flank, at the same time that their Center and Left were attacked by the Center and Right of the King's Army, it was impossible for M. *de Waldeck* to remedy the Disorder on his Right, which was soon communicated to the Center and Left, and ended in their precipitate Retreat from the Field of Battle, with the Loss of all their Artillery, and the greatest part of their Foot ; because M. *de Waldeck* had posted too large a Body of these last in the Village of *Ligni*, and could not draw them out, after they were abandoned by the Horse.

The Relation of these Particulars makes it evident, that a Field of Battle, chosen with great Attention, by a General who determines to await his Enemy there, can never be so level, so open, or so equal in all the Advantages of Situation, as to prevent a more expert General from improving some little Conveniences in the Disposition of the Soil, that frequently afford him an Opportunity of bringing the Battle to a glorious Decision.

This Action may be justly ranked among the noblest Atchievements of M. *de Luxembourg*, when we consider the admirable Capacity,

city, and profound Judgment he discovered in the Art of War; as well as the peculiar Vivacity with which he accomplished his Designs. This great Commander formed in one Moment the Plan of his March against the Enemy, and compleatly executed his whole Scheme with so much Vigour, as made it impossible for the Enemy to elude the fatal Blow he was preparing to give them.

In the same Year 1690, and much about the same Time, the Duke of *Savoy* was defeated in the Battle of *Stafarda*, by his Majesty's Army, under the Command of M. *de Catinat*.

The Battle
of *Stafarda*
1690.

The Duke, on this Occasion, committed so many Errors, that they may be justly said to have occasioned the Loss of that Battle. I shall mention the Particulars.

This Prince had determined to engage the King's Forces, when they had passed the *Po*, near *Saluzzo*, and yet he suffered himself to be attacked by them, and for no other Reason, than because he himself was posted in a very convenient Situation for an Engagement; tho' it was not so advantageous as it might have been rendered, had his Troops been more judiciously disposed.

His Right was covered and supported by a Brook, which flowed by the Abby of
Sta-

Stafarda ; and on the Bank of which, at regular Intervals of Distance, were several Lodgments capable of containing the Foot, who, in that Situation, would have sustained and protected the Right of his two Lines. But instead of posting his Wings in these Lodgments, he stationed them at some distance from his Line, and placed the Foot there, who being at too great a Remove to be supported by the Line, were forced successively by the King's Forces, before they even attacked the Enemy's Front.

This first Error lost the Duke of *Savoy* a considerable Body of Foot, before the Battle began in the Front of the Armies. His Left might have been covered by an old Dike of the *Po*, beyond which the Ground which extended to that River, was very advantageous. But this Prince neglected a Projection formed by the Dike, and never once improved it as he ought : For if he had supported his Left with this Projection, which was equal in height to the Lodgments already mentioned, on the Right, the Right and Left of his Army had been equally well supported, with this Advantage to the Left, that the Ground within the Projection, being much more spacious than that without, where we must have been obliged to have made our Advance to the Front so sustained ; a Party of the Enemy's
Horse

Horse in the Left Wing might have extended themselves beyond this Projection, if we had happened to have dislodged their Foot.

This Account of the bad Disposition of the Duke of *Savoy's* Army, both to the Right and Left, sufficiently shews, that the Front of the first Line was at too great a distance either to sustain the Right of the Foot, who were posted in the Lodgments, or to prevent our Foot from pushing to the Projection on the Left, by which Omission our Foot made themselves Masters of that Situation; extended themselves along the Projection of the Dike, and directed their Fire upon the Left Wing of the Enemy's Horse, who were immediately obliged to retreat from that Ground, and fall off beyond the Front of their Foot; in Consequence of which Motion, the Horse of our Right Wing, who, till then, were posted behind the Foot, had an Opportunity to possess almost the same Ground, on which the left Wing of the Enemy's Horse was drawn up; and then the Foot became intirely useless at the Dike, because they had accomplished their Design, which was the Dislodgment of the Enemy's Left Wing of Horse: This Body of Foot therefore, by extending to the Left, rejoin'd the Foot at the Front of the Army, in Order of Battle, and advanced to the Front of the Enemy's Foot, who were quickly defeated.

If

If the Disposition of the Duke of *Savoy's* Army had been exempted from the Misconduct I have described, it is very manifest they would not have been so easily defeated, because the King's Army sustained an Inconvenience, which could not be remedied till the Battle was obtained. The Affair was this.

Monf. *de Quinſon* commanded the Left Wing of our Horse, when the Army was in Motion to meet the Enemy; and thought fit to open the Left, in order to leave a sufficient space of Ground for the Centre and the Right to march in Front: In Consequence of which Motion he insensibly found himself below the Source of the Brook of *Stafarda*, and did not know that he was separated from the Foot, till he perceived the Brook was no longer fordable by the Horse. During the Continuation of the Battle, which lasted above six Hours, he could only move along the Brook, to find out a place where his Troops might pass over, which he did not observe till he came to the Abby of *Stafarda*, which was behind the Enemy's Army, where there was a Bridge over the Brook; but he did not make this Discovery till we had gained the Battle: And thus we were victorious, without the Assistance of the Left Wing.

In

In this Example, we see the Misfortune a General sustained, for want of sufficient Capacity to be sensible of the Advantages he might have acquired from the Situation where he proposed to receive the Enemy who advanced to give him Battle. But this Capacity is abundantly inferior to that of a General, who can immediately chuse upon the Spot the most commodious Situation, to facilitate his Victory over the Enemy.

The Year 1691, affords me an Instance of the second Class of great Actions, at the Encounter at *Leuse*.

Towards the close of the Campaign, the Prince of *Orange* was encamped at *Leuse*, and M. de *Luxembourg* had drawn up the King's Army under *Tournay*, where he waited for the Dismission of the Enemy's Army, that he might distribute the Troops he commanded, into Winter Quarters.

The Distance between *Tournay* and *Leuse* was considerable enough to make the Prince of *Orange* believe his Army could have nothing to fear, in their Decampment, from M. de *Luxembourg*; this Prince therefore thought it sufficient to post a considerable Body of Horse at the Head of the Camp, he was preparing to evacuate; till his Army had passed the Brook of *Catoire*, which was behind the Camp; and he neglected to place proper

The Encounter at
Leuse,
1691.

proper Parties of Foot at the Bridges over the Brook, to receive and support the Rear Guard of his Horse, in case they should be pushed.

M. de *Luxembourg*, whose Design was to attack the Enemy in their Decampment, was attentive to improve this Motion, in case it should not be conducted with Prudence and Precaution; and having received Intelligence that the Enemy intended to decamp the next Day, he imagined it practicable to attack the Prince of *Orange's* Rear Guard, should he neglect to post a Body of Foot at the Brook. This General therefore, marched from *Tournay* in the Night, with a Party of Horse, and arrived early in the Morning at *Leuse*, entirely unobserved by the Enemy; because the General Officer, who commanded the Prince of *Orange's* Rear Guard, had not dispatched any of his Men beyond *Leuse*, to observe if any Troops were advancing towards him: So that M. de *Luxembourg*, who was always indefatigable in the Execution of his Designs, marched with the utmost Expedition, and coming up with the Horse of the Rear Guard who, by a strange Negligence, were not so much as drawn up in Array, but extended themselves in a kind of Column towards the Bridge over which they were to pass; he charged them so abruptly, that they had not time to form themselves into a

Line;

Line: In a Word, he intirely defeated them, and drove the whole Body to the very Edge of the Brook, where their Disorder was irretrievable, because, as I before observed, no Care had been taken to place a Party of Foot to receive the Horse at the Brook.

Here the Encounter ended, because the Columns of Foot who were still near the Brook, returned thither, tho' without any other Effect, than having an Opportunity of beholding the Disorder of their Rear Guard, and the Satisfaction M. *de Luxembourg* enjoyed in chastising a presuming General, who attempted to decamp before him, without taking all the requisite Precautions for the Security of his Rear Guard, which for some time, must unavoidably be separated by some Defile or other.

This Example justifies my Maxims, with Reference to the Regulation of a retreating March, in such a manner, when the Troops are within the Enemy's Reach, so that they may be able to withdraw to a reasonable Distance; because that Enemy may have Intelligence of such an intended Motion, soon enough to improve it to their own Advantage, as it happened in the Encounter at *Leuse*.

It appears likewise by this Action, that tho' a General should imagine his Army to be out of the Enemy's Reach, he never should neglect the Precautions necessary to secure his

Motions, which he ought to form with the same Circumspection, as if they were to be made in the Presence of his Enemy. Besides, a General, by his Toleration of any Neglect in the Service, authorizes the Troops to habituate themselves to Inapplication, and Remissness in Military Discipline.

The Year 1692. furnishes me with a remarkable Instance of the second Class, in the Action of *Steenkirk*, upon which several Reflections may be made.

The Battle
of *Steenkirk*,
1692,

The King, after the taking of *Namur*, quitted the Army, and left the Command to *M. de Luxembourg*, who was only commissioned to preserve the conquer'd Places and the Country, for which Reason, this General contented himself with a strict Observation of the Prince of *Orange's* Motions; who, as he was extremely mortified at his Inability to preserve *Namur*, endeavoured to form some Attempt against the King's Army, or, at least, to subsist his Troops at the Expence of a Country where the *Spaniards* were no longer Masters.

M. de Luxembourg was encamped with his Right to *Steenkirk*, and his Left to *Anghien*; and the Prince of *Orange* between *Tubise* and *St. Arnelle*, a woodland Country, and abounding with Defiles which separated the two Armies, and therefore it seemed impossible for them

them to come to any general Action. But the Prince of *Orange* having discovered that *M. de Luxembourg* held a secret Correspondence with one of his Secretaries, who constantly inform'd that General of all the Circumstances that came to his Knowledge; he resolv'd that this Discovery should contribute to the Concealment of his March towards the King's Army.

With this View, he secretly surpris'd this Secretary in his Closet, and compelled him to write a Letter, in his Presence, to *M. de Luxembourg*, acquainting him, that the Prince of *Orange's* Army would be out, the next Day, upon a great Forrage, on the other side of the Brook of *Steenkirk*, opposite to the Right of the King's Army; and that in order to cover this Forrage, a considerable Body of Foot were to march, that night, with Cannon, to possess the Defiles which separated the Armies, in order to secure the Forragers from being molested in their Return.

M. de Luxembourg receiving this false Intelligence from one he thought devoted to his Interest, disregarded the Information of a Partisan, who gave him notice, that all the Defiles which separated the Armies, were filled with Foot, and Horse and Cannon; and as this Account he received from the Partisan, agreed with his Correspondent's Letter, he imagin'd those Troops were only

posted in the Defiles, in consequence of those Precautions, which his false Advice acquainted him were taken by the Prince of *Orange*, for the Security of his Forrage. And as he was in no Condition to attempt any thing against an Action in which the Enemy took such Precautions, he continued quiet in his Camp, till he heard that the Enemy's Forces suddenly issued from all Parts of the Defiles which were very near the Front of the Camp; and had form'd themselves in Order of Battle, and that the Brigade of *Bourbonnois*, who were encamped without the Line to cover the Right Wing of the Army, were already attacked by a Party of Foot, much superior to them in Number.

M. *de Luxembourg*, amidst the Consternation that seized the whole Front of the Army, had Recourse to his usual Vivacity. All his Troops were in Arms in a Moment, and form'd in Order of Battle, at the Head of his Camp: This General sent such a sudden Relief to the Brigade of *Bourbonnois*, (who had lost their Camp, and several Pieces of Cannon planted in its Front, and which the Enemy had already turn'd upon the King's Army) that this Brigade, in Conjunction with the Troops dispatched to their Assistance, chased the Enemy from the Post they had possessed, and retook the Cannon; and thus all the Disorder on the Right was effectually

tually composed. The Enemy's Front, who prepared to attack ours, were greatly embarrassed in their Approach; because there were some Places planted with Hedges, tho' not very thick or difficult to be penetrated, and which inclosed several little Meadows; so that the slow Advance of their whole Front, gave our Troops sufficient time to form themselves: But when the Enemy, elated with the Success of their Left, against the Brigade of *Bourbonnois*, were resolved to begin the Charge, they were so briskly received by our Troops, that they were not only incapable of gaining upon our Front, but were obliged to fall off, when they saw the Troops of their Left dislodged from the Ground where the Brigade of *Bourbonnois* had encamped.

The Retreat of the whole Front, gave our first Line an Opportunity to advance, and to leave, by that Motion, a sufficient Space for the second Line to form themselves behind the first. Our two Lines, till then, had only been under Arms at the Head of their Camp, so that the Camp of the first, was still extended entirely between the two Lines.

All the Front of the Army who, at last, by the Aid of their Fire, had Liberty to form themselves in Order of Battle, advanced upon the Enemy, who being thrown into some Disorder by their Loss of Men, were

forced back in Confusion, to the Defiles, out of which they had issued to attack us, and were compelled to leave behind them the Cannon they had planted in their Front, together with a Field of Battle covered with twelve thousand slain.

It is reasonable, however, to believe, that if the Enemy's Right Wing, whose Province it was to attack *Anghien* and our Left, had not mistook their Way, during their March in the Night, or if they had assaulted our Left, at the same time that the Engagement began at the Right and the Center, it would have been very difficult for M. de *Luxembourg* to have sustained a general Attack from the Right to the Left, in a so unexpected a Conjunction.

This was the severest Engagement in all the Course of that War, but it was not dignified with the Name of a Battle, tho' all our Army had a Share in the Action; and it has been only called an Encounter, because the Front did not charge, at the same time, through their whole Extent. This Account which I have thus given, will furnish me with several Reflections, some of which will relate to the Prince of *Orange*, and the others to M. de *Luxembourg*.

It must be granted, that no General could improve the Treachery of a Spy to more Advantage

vantage than the Prince of *Orange* did on this Occasion; it is likewise certain, that the Design of that Prince was truly great, and must have been attended with Success, had it been accomplished with a Vivacity equal to the Judgment that conducted it to the very Point of Execution: For M. de *Luxembourg* entirely disregarded the Information he received from the Partisan. Besides, every Particular which this Person related to him, was so conformable to his Intelligence from the detected Spy, that it only tended to confirm him in his Opinion of that Person's Fidelity, and did not create the least Diffidence in his Mind. His Credulity, in this Particular, was the more reasonable; because the Partisan, who could only discover what was transacted at the Head of the Defiles, and was incapable of extending his View to the Rear, had no Opportunity of acquainting M. de *Luxembourg* with any Circumstances, but such as this General imagined he had already received from the Spy. For which Reason the King's Army, tho' encamped at the Head of long, and almost impracticable Defiles, and commanded by a General of uncommon Vigilance, would have been surprised, and even defeated in its Camp, had the Prince of *Orange* executed his Scheme with a Vigour proportioned to his Judgment in forming it. This Prince ought not to

have disposed his Forces in Order of Battle, when they had passed through the Defiles ; but as he marched them in different Columns, and drew them out through several Defiles ; all those Columns should have attacked the Front of the Camp to which they were then opposite, in order to make it difficult, in every Part, for their Enemy to have recourse to Arms, and to form themselves in a regular Front. It would have been sufficient for his Purpose, if his Columns had penetrated into the Camp, to create a general Disorder, and secure an immediate Success to the Efforts he made in a Column, with the Troops of his first Line. Those of the second should have been drawn up in order of Battle, as well to sustain the first who made their Attack in a Column, as to let our Army see that Front in a Condition to act, and by that Demonstration, to have deprived them of all Thoughts to form themselves behind the Camp, after they had abandoned it, in consequence of their Incapacity to make good the Front.

When an Attack is carried on against a whole Army, who are surprized in their Camp, it ought to be executed by strong Columns, who open, who penetrate, and who separate that Camp ; and this Conduct alone is sufficient for their Destruction. The Field of Battle is generally at the Head of the

the Camp, and very seldom in the Rear: And therefore an Army whom the Enemy intends to surprize in their Camp, should not have any Time allowed them to range themselves at the Head of their Camp; and it is absolutely necessary to assault them with all the Vivacity requisite to prevent their forming that Disposition. This Circumstance alone precipitates an Army into a shameful Flight and Confusion, and compels them to abandon their Artillery, and all their Baggage. I have now represented the principal Error committed by the Prince of *Orange*, in the Execution of a Project, which was well concerted in every other Particular, and very happily conducted to the critical Moment of Accomplishment.

With Regard to *M. de Luxembourg*, he ought to be applauded for that Vivacity with which he issued out his Orders for ranging his Army in a Disposition for Battle, and retrieving the first Disorder in his Right: He is equally commendable for the Intrepidity with which he caused his Army to enter upon a Field of a Battle, of which they were destitute at the Beginning of the Action; and for the Conduct with which he improved the first Motion he saw the Enemy making towards a Retreat, that so he might the better drive them back to their Defiles, and throw them into a general Confusion.

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This Example furnishes me with a general Reflection, very useful to all those who are either charged with the Operations of War or Politicks, which is, that it will be always necessary to compare the different Informations we receive on the same Subject, and not to suffer our Prepossession for the certainty of one Particular, to betray us into the Neglect of any Precaution necessary to prevent the Consequence which may arise from that we imagined to be least credible. And tho' of all the Species of Intelligence, that which comes from a Correspondent or a Spy, whose Integrity we have often experienced, seems to be most certain, it is yet very possible, that this Correspondent, or that Spy whom we imagine to be so faithful, may either be insincere, or perhaps compelled to give us false Advice of Affairs. For which Reason, it is always prudent to compare our Informations with each other, and to endeavour at the Attainment of Truth by various Expedients.

The En-
counter at
Spierbach,
1692. In the same Year 1692, there was a great Engagement in *Germany*, near *Spierbach*, between a Body of Troops detached from the Army commanded by *M. de Lorge*, and the whole Forces of the Enemy.

I was ordered to take upon me the Command of nine Battalions of a Regiment in the Army,

Army, which was then stationed at *Markheim*, under the Conduct of *M. de Melac*, to prevent the Enemy, who were encamped near the same Place, from throwing a Bridge over the *Rhine*. *M. de Melac* happened to be indisposed, and our General ordered me to command that Body of Troops. At my Arrival there, I found the Enemy had taken an Opportunity, in a Swell of the *Rhine*, to finish a Bridge between the Isle of *Santhoven*, and the *Palatinate*, unknown to *M. de Melac*, and had even passed over above four thousand Men. This Body alone was superior to mine, which was reduced to less than 3000, under Arms, by a Distemper which then prevailed among them. My only Expedient, in that Situation, was to cover myself with a Branch of the *Spierbach*, which flowed round *Spires*; to give notice of that Motion to our General, who was then nine Leagues from me, that I might receive his Orders; and to wait for an Opportunity of opposing the Enemy at the Outlet of the Dike of *Opau*, to which their Bridge projected. All this I accomplished, in the Space of twenty four Hours, during which time I intrenched myself on the Bank of the *Spierbach*, in such a Front as was proper for me to possess; and when I fixed myself in that Disposition, I waited for the Orders of *M. de Lorge*, and the Arrival of the Enemy.

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I received Orders from M. *de Lorge*, to quit that Post, and retire to *Philipsburg*; where I was to pass the *Rhine*, and mark out a Camp for his Army. He was in Hopes, by this Motion, to oblige the Enemy to repass the *Rhine*; but when I received that Order, it became impossible for me to execute it, because the Enemy's Army, who had penetrated into the Landswart of *Spire*, was not above a Cannon Shot distant from me. The Slowness of the Enemy in entering the Landswart, and making their Dispositions to attack me, prevented them from advancing up to my Troops, any sooner than four in the Afternoon. We sustained their Fire, and all their Efforts, till Midnight, when they thought fit to retreat, leaving a thousand, or 1200 Men dead in the Front of the Attack, with very little Loss on my side, because I was entrenched.

Two Errors which the Enemy committed, preserved this weak Body which was attacked by two Battalions and a hundred Squadrons. The first was the Tardiness of their March into the Landswart, and their Attention to the Fire of five Pieces of Cannon which we had planted against them. The second appeared in the Disposition of their Troops to attack me, which were only extended against the Front I could oppose to them. Had they surrounded me, which
they

they might easily have done with their superior Numbers, I must, inevitably, have been overwhelmed in a little Time.

The Relation of this Engagement, will evidently point out the great Danger a few Troops sustain, when they are long exposed to a superior Army. I was detained by the Orders of the Marshal *de Lorge*, and when he commanded me to retire to *Philipsburg*, through little *Holland*, the Enemy was too near me, to make it possible for me to acquit my self of my Commission. I had a Plain of three Leagues to cross, in the View of a hundred Squadrons of Horse, who would have destroyed all my Troops in that March.

The Year 1693, furnishes me with Reflections on the Battle of *Narwinden*; but as I have already taken notice of this Action, in the Course of the preceding Chapters, I shall only mention those Particulars in this Place, which relate to the Subject of Battles.

The Battle
of *Narwin-*
den, 1693.

The Enemy, at the first Approach of our Horse, might have quitted their Camp, with the *Geet* in their Front, if they had not been disposed for an Engagement. They had more than sufficient Time to accomplish that Motion in Safety, but they imagined themselves capable of making their Post so good, that *M. de Luxembourg* would not
ven-

ture to attack them. Their Disposition was this: The Prince of *Orange* intrenched his Camp where he thought it necessary, and lodged a Body of Foot in the Village of *Narwinden*, which was likewise intrenched. This Village was in the Center, and extended behind, to the Line of Foot, and in Flank to the Intrenchments. The Prince possessed to his Left, the Village of *Romsdorf* seated on the Brook of *Landen*. He likewise intrenched the Front of that Village, which extended in Flank to another Intrenchment: His Right, which was supported by the *Geet*, and covered, from that River to *Narwinden*, was also intrenched with a strong Hedge, which could not be passed by more than one Man at a time, and his whole Front was covered with more than a hundred Pieces of Cannon. I shall next describe the Disposition of M. de *Luxembourg*. This General, as I have already remarked, arrived in View of the Enemy's Camp, about three in the Afternoon, with only the Right Wing of his Horse; the rest of the Army could not come up till Midnight; and yet M. de *Luxembourg* advanced with his Horse to the Height of the Village of *St. Gertrude*, where the Front of the Plain being of a small Extent, he form'd his Troops in several Lines as fast as they arrived. The first four Battalions were employed to dislodge the Detachments from the Enemy's Army,

Army, who had possessed *Landen*, which in some measure fronted the Left of the Enemy's Camp, and in the ensuing Day of Battle, was to be on the Right of the King's Army in their Advance to the Enemy.

The first Error which the Prince of *Orange* committed, in not sustaining that Post, but resigning it too easily, furnished M. de *Luxembourg* with an Opportunity of posting above forty Battalions, in the Night, between *Landen* and *Romsdorf*, and to the Left of *Landen*, in Front of the Enemy's Left. The Horse of the Prince of *Orange*'s Left Wing having not a sufficiency of Ground in Front, nor Space enough to range themselves behind the Foot who were intrenched, were obliged to form themselves in a kind of rectangular Figure, with their Right above *Romsdorf*, their Left to the O, and projecting the Head to the Brook of *Landen*. This particular Disposition of the Enemy, which I have not mentioned before, rendered this Wing useless during the Battle, as I shall observe in the Sequel of this Account.

Our Horse to the Right, as I have intimated before, had advanced to the Height of the Village of *St. Gertrude*, and sixteen Squadrons of Dragoons stretched, during the Night, to the Right of *Landen*; and before the Battle began, were posted
above

above the Brook, opposite to the left Wing of the Enemy's Horse, not only to streighten them, but to discover the Passes of the Brook, and act against the Enemy's Flank, if Occasion should offer. The Center, which *M. de Luxembourg*, for want of a sufficient Front, disposed, during the Night, into eight Lines, of Horse as well as Foot, was between the Hours of five and six in the Morning, ordered into so judicious a Motion by the General, that their March to the Enemy form'd an Order of Battle in two Lines, and this was executed under the Fire of the Enemy's Canon, which began to play at four in the Morning. The Foot to the Left of the first and second Line, was appointed to attack the Village of *Narwinden*, and the left Wing of the Horse was extended towards the *Geet*, opposite to the Enemy's Right. Their Orders were to force the Hedge, which, at a little Distance, covered the Enemy's Right, and to charge the Horse of that Wing, provided they could form themselves within the Hedge, and according as they should see the Attack on the Village of *Narwinden* prosper; because it would have been impossible for our Horse to possess the Ground within the Hedge, while the Enemy continued Masters of that Village.

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Such was the general Disposition of the two Armies, the Moment before the Engagement; and it appears from this Description, that as the Enemies were ranged behind their Intrenchments, we were reduced to two Methods of Attack, previous to that we made upon their whole intrenched Front, which could not be engaged, without sustaining the Fire of the two Villages in our Flank. For which Reason it was necessary, before we charged the Enemy's whole Front, to dislodge them from the two Villages, and consequently the King's Army must be exposed to their Cannon, and the Fire from the Front of their Intrenchment, at least, till we had made our selves Masters of the Village of *Narwinden*, and till the Fronts of the Army could march up to the intrenched Van of the Enemy, to attack them at the same Time.

The Battle began at six in the Morning, with the Attack of the Village of *Narwinden*, which we carried in a little Time: But as the Order which M. de *Luxembourg* had given, for his Right to engage the Enemy's Center and Left, the Moment they saw the Attack on that Village successful, was not executed by the General who commanded the Right of the King's Army; the Troops who entered *Narwinden* in some Disorder, and had not the Precaution to post them-

selves, through the whole extent of the Village, against the Enemy, were driven out by the Enemy's Foot on their Left, who drew off from the intrenched front to form this Attack.

This Motion was seen by all our Right, and the General who commanded it, was desired to improve so favourable a Conjunction, by attacking that Front which began to be, in some measure, divested of the Foot, who marched to retake *Narwinden*. But this Proposition was made in vain, tho' that Movement and this Attack had, in all Probability, decided the Battle in our Favour the same Moment.

Our Foot, who were dislodged from *Narwinden*, being recovered from their Disorder, that Village was assaulted a second time, and carried by *M. de Luxembourg*; but the Troops were still unable to maintain their Acquisition, because those who commanded them, had not sufficient Skill to post themselves better in the Village, than they had done before, and they were chased away, a second time, by the same Foot of the Enemy's Left, who had displaced themselves once more, in order to march to this Attack, which they accomplished with the same Impunity as attended them the first time.

These Particulars make it evident, that if the General of our Right, had executed the
Orders

Orders of M. de *Luxembourg*, and had attacked the Left and Front in the Retrenchment, when he saw the Enemy left destitute of their Foot, the Battle had not only been five or six Hours shorter than it proved, but it would likewise have cost us infinitely fewer Men.

In this Situation, M. de *Luxembourg*, who was not a Man to be discouraged at two unsuccessful Attacks, came himself to draw to his Right, part of the Foot and the King's Household. With these fresh Troops he attacked and carried *Narwinden* a third time; but the Enemy, who had twice unfurnished their Left to retake *Narwinden*, were punished, this last time, for their Temerity. The General of our Right, having marched himself with the Troops which M. de *Luxembourg* had form'd, I was left alone to command the Right, which I immediately ranged in a Disposition to attack the Enemy's Left, when they would furnish me with an Opportunity, which they were pleased to do very soon, by displacing their Foot again, and even sooner than they performed those Motions each time before, because they saw that M. de *Luxembourg* had attacked the Village with a greater Number of Troops.

I let the Foot march then, till I judged them incapable of returning to their Intrenchment, before it would be carried by

our Foot. I committed this Attack to the Marquis *de Crequi*; placed my self at the Head of the Horse to the Right, and led them up to the Enemy's Front, which was only closed with the Carriages of the Artillery laid cross. The Enemy's Foot to the Left, who were marching to sustain *Narwinden*, seeing all the Right of our Army in Motion towards the Front of the Intrenchment, and judging that the Foot who were left there, would be insufficient to oppose the Efforts of ours, endeavoured to return to their Post, but found that Motion impossible, because they were attacked by the Foot, who were led up by the Marquis *de Crequi*. This Body, therefore, of the Enemy's Foot, which consisted of nine Battalions, form'd themselves into a Square, to oppose the Horse with whom I had entred the Intrenchment. But the Destruction of these nine Battalions was not my principal View at that time: That part of the Intrenchment which I had forced, was the highest Ground in all the Enemy's Camp, and from thence I had a View of the Prince of *Orange*, who was marching below me with all his Right, to renew his Attack on *Narwinden*, not knowing that all his Left had been forced. I then disposed the Horse in order of Battle, with their Front to the Flank of the Prince of *Orange's* Troops, in order to charge them, if they

I

conti-

continued their March to *Narwinden*. I sent to acquaint M. *de Luxembourg*, that our Right had master'd the Left of the Enemy's Camp; upon which he made a vigorous Advance with all his Left and Center, and posted himself between *Narwinden* and the Enemy's Front, who being too much streighten'd in their Ground, by a Bend of the *Geet*, were easily forced by our Left, and either cut in Pieces, or drowned in the River. And thus the Enemy's Left and Center were entirely defeated.

The Enemy's Horse to the Left, who had not appeared in the Front of the Line, were disposed in a kind of Rectangular Form, as I have already observed, with their Front to the Rivulet of *Landen*. But when they saw the Intrenchment forced by the Troops of our Right, they immediately shrunk away, without any Molestation, because they had been posted at a considerable Distance from the Heat of the Action. This indeed was the best Conduct they could have recourse to, because they were too much contracted in their Ground, to be capable of attacking the Front of our Troops, who had forced the Intrenchment.

Thus ended the Battle of *Narwinden*, in which the Enemy had above eighteen thousand Men either killed or taken; they likewise lost 104 Pieces of Cannon, and a prodigious

gious Number of Officers, Dragoons, and Colours.

One particular Reason why our Foot could not maintain their Post in *Narwinden*, tho' they had taken that Village twice, was this. The Peasants in that Country, instead of planting Hedges on the Boundaries of their Lands, raise little Walls of Earth, about five Feet high, and one in Thickness; and that Party of our Foot, who advanced to the intrenched Avenues, and those little Walls, crowded into the Village, with the other Body of Foot, who had driven the Enemy from the Avenues, so that they could only charge the Enemy in a Front equal to the Breadth of the Street; and never considered that it would be impossible for them to give their Front a sufficient Extent, without demolishing those Walls of Earth, that were contiguous to the Place where they made their Attack, and which they might have effected in a few Moments; after which they ought to have posted a Body of Foot, along the Walls where the Village faced the Line, in order to form a Front, which might, at least, have equalled that of the Enemy, when they returned to attack that Village: And yet this was a Precaution that seemed very obvious, because they saw the Enemy's whole Line of Foot posted in such a manner, as facilitated their Return to the Village. So that when the

the Enemy were in Motion to attack this Village, they advanced to those little Walls that were not lined with Troops, and, at the same time, secured the Avenue to the Village, which they had been vigilant enough to keep open on that Quarter; by which means they ranged themselves into a Front, whose Extent exceeded that which our Foot form'd for their Defence.

Those Persons who would detract from the Glory of M. *de Luxembourg*, have said, tho' very injudiciously, that this General ought to have improved this great Victory, on the Spot, much more than he did. In Answer to which, I refer them to my Observations, in another Place, where I have shewn the Impossibility of such a Proceeding.

The Account I have given of this great Battle, is sufficient to make it evident, that an Army, tho' it be well intrenched in Front, and has its Wings commodiously covered, may yet be attacked, and defeated by another Army of equal Force; because the Motions of those who attack are all free, their Front is not exposed to any Embarrassment, whilst those who are attacked, are frequently incapable of forming a Front sufficient to resist their Invaders; in this Situation, their cover'd Wings are rather prejudicial than serviceable, because they are obliged to continue inactive for want of a

proper Extent of Ground to form their Motions. The Enemy so intrenched, not having sufficient Room to range their Troops in several Lines, and at such a Distance from each other, as is necessary to secure the Freedom of their Motions, are obliged to dispose their Troops into such an Angle, as renders them entirely useless in their Front, the Disorders of which are irretrievable, because they can never present such a Front as will be successful when they engage an Enemy, who has already disorder'd the Troops that guard the intrenched Front. For which Reason, when their Front has been once laid open, and the Enemy's Troops, who have forced them, are in a Condition to maintain their Advantage for some Time, this Front must inevitably lose Ground in their Rear; and as that Circumstance will render them incapable of forming their Motions, their Disorder will naturally be communicated to the rest of the Army, upon whom this Front must press in a confused Retreat, and without sufficient Room, either to rally themselves, or to leave a due Space for the second Line to confront the Enemy.

The same Year 1693, will furnish me with Reflections on the Battle of *Marsaglia*, in *Piedmont*, in which the King's Army was victorious, under the Command of the Marshal *de Catinat*.

The

The Duke of *Savoy* had forced this General to the further end of the Valley of *Pragilas*; after which he took the Fort of *St. Brigide*, above the Citadel of *Pignerol*; he had likewise bombarded that City, and was preparing to besiege it in Form. M. *de Catinat* might possibly have been in a Condition to oppose the Enterprises of this Prince, with a Body of Foot, much superior in Number to those of the Duke of *Savoy*, had he varied his general Plan for the Defensive. But as my Remarks are, at present, confined to Battles, I shall only observe, that M. *de Catinat*, in this Conjunction, had not a sufficient Body of Horse to enter the Plain of *Piedmont*, and attack the Duke of *Savoy*, with a View of obliging him to discontinue his Design on *Pignerol*. He resolved therefore, to continue in the Post where he had fixed his Troops, till he could be joined by the Forces that had been detached from the Army in *Germany*: The Situation of the Duke of *Savoy's* Forces, makes it evident that M. *de Catinat* could no longer assemble his Horse in any Place but the Valley of *Susa*, from whence he could only march through *Rivoli*, to the Enemy. The Duke, whose principal Intention was to block up *Pignerol*, on the Side next to *Pragilas*, and who had determined to engage our Forces, in case they should advance

The Battle
of *Marfaglia*, 1693.

advance from *Piedmont*, permitted M. *de Catinat* to march through the Valley of *Susa*, without any Opposition.

This first Error in the Duke's Conduct, was very great; for he suffer'd the King's Troops to post themselves between his Army and *Turin*; and consequently had M. *de Catinat* been able to have subsisted his Army, for some time, in that Situation, it is certain that the Duke of *Savoy*, during that Period, could not have enjoyed any Communication either with *Turin* or *Piedmont*. But as this Prince was perswaded that he should conquer, instead of being defeated, he firmly believed that he should totally destroy the King's Army, who, after they had lost the Battle, could only retreat to *Susa*; and was as confident, that if, after his Victory, he could but secure the further Side of that Valley, by marching his Foot thither, through *Cumiana*, and *Javan*, he should prevent the shattered Remains of our Army, from reassembling at *Susa*, and consequently should take that City as soon as he presented himself before it, after which, he could not fail to make himself Master of *Pignerol*. This Project would have been well concerted, had it succeeded to his Expectation, but it was liable to a number of great Inconveniencies, should it happen to prove abortive.

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The Duke of *Savoy* committed a second Error, in quitting too late, the Parts adjacent to *Pignerol*, so that he could only confront the King's Army at *Marsaglia*, between the Rivers *Cisola* and *Nova*, which in that Season of the Year, were almost dry. He imagined, however, that, by this Disposition, he had secured the Advantage of fixing the Field of Battle in such a manner, that he could easily retreat to the *Po*, near *Villa-Franca* and *Saluces*, were he to sustain a Defeat; but should he have the Fortune to be victorious, he might then, as I have already observed, march part of his Foot through *Cumiana*, and *Javan*, to compleat the Destruction of the King's Army, in their Retreat through the Valley of *Susa*.

The Duke of *Savoy*, in Consequence of this Disposition, quitted the high Grounds at *Piosala*, where he might have supported his Left, by advancing his Right towards *Sangon*; but his Left was now destitute of Protection, and his Right was only supported by two small Woods at *Volvera*, where he had posted some Battalions; and these Woods, in reality, were only a Growth of Bushes, which it would not be difficult even for the Horse to penetrate: His Removal from the rising Grounds about *Piosala*, gave the King's Army an Opportunity of extending their Right, to the Foot of those Eminencies, and
confe-

consequently of attacking the Enemy's Left, where their Disorder began, and was easily communicated to the Center; and when the Left and the Center fell back upon the Right, it was easy for the King's Army to advance and dislodge them from the Field of Battle.

This Example of the first Class of great Actions, namely when two Armies engage through the whole Extent of their Fronts, furnishes me with several Reflections; some of which will relate to the manner of forming an Attack, and others to the Situation of the Ground chosen for the Action, and the Inducements for coming to an Engagement.

With Reference to the manner of forming an Attack, I think it necessary to observe, that a General who intends to receive Battle from an Enemy, should always force him to offer it with all the Disadvantages that can possibly attend the Attack of an Army commodiously posted. If the Duke of *Savoy* had drawn up his Left, on the Eminencies of *Piosala*, *M. de Catinat* would have found it much more difficult to have defeated that Prince's Army, because he must first have dislodged the Foot from that Elevation, which, considering the Nature of the Place, would have been a very arduous Attempt.

As to the Choice of a Place for the Engagement, I may justly say, that if the Duke of *Savoy* had advanced with his Army, to the opening

opening into the Valley of *Susa*, it would have been impossible for our Troops to have extended themselves in the Plain, before this Prince, in order to engage. The Duke, indeed, by this Motion, would have drawn his Troops to a Distance from *Pignerol*, and given *M. de Catinat* an Opportunity of posting his Forces there, after he had marched them through the narrow Passes that run between the Valley of *Susa* and the *Pragilas*; but what would then have been the Event? Our Horse could never have subsisted in the Valley of *Susa*, but must soon have been necessitated to repass into *Savoy* and *Dauphiné*: And tho' the Siege of *Pignerol* had not then been formed, the Duke of *Savoy* could have sustained no Inconvenience, by marching to a Situation remote from *Pignerol*; provided that Motion would furnish him with such an Advantage as would enable him to destroy the King's Army; or, at least, to render *M. de Catinat* incapable of advancing to him, a second time, with his Horse, for want of Subsistence; the Duke of *Savoy* therefore, instead of being obliged to abandon his Design, by his Remoteness from *Pignerol*, would have only reserved it for a more favourable Conjunction.

With respect to the Inducements for coming to an Engagement, I can venture to declare, that the Duke of *Savoy* had not any

any of those real and solid Motives by which a General ought to be conducted, when he prepares to attack his Enemy. The Elation of Mind, into which this Prince had been wrought by his Success in the preceding Campaign, was his only Inducement to hazard a Battle. He grew persuaded that he should defeat the King's Forces ; and as *Marsaglia* was to be the Scene of his Victory, he imagined we should be so exposed in that Plain, as to make it easy for him to cut off the Foot entirely, before they could possibly retreat to *Susa* ; and that even this was a Place where they would not presume to reassemble for Protection, because the City could not be of any Importance to them, and the Citadel was not large enough to receive them. He was likewise persuaded, that were it practicable for the Horse to re-enter the Valley of *Susa*, they would be incapable of continuing there, and must be obliged to march back to *Savoy* and *Dauphiné* ; after which he would be in a Condition to take *Pignerol* with part of his Foot, in a very short time, and that he could march his Army into the King's Territories, and accommodate them with Winter Quarters, even in *Lyons* and *Grenoble*. Such Thoughts as these did the Duke of *Savoy* entertain, when he engaged our Army at *Marsaglia* : From whence I conclude, that whenever a General

ral deviates from the reasonable Maxims he ought to pursue, he is in great Danger of being defeated in his Project, which, by his injudicious manner of concerting it, exposes him to great Inconveniences in the Event.

M. *Catinat* has been censured for not sufficiently improving so compleat a Victory, as well as for not taking *Coni*, nor securing Winter Quarters for the King's Army, in the Plain of *Piedmont*. As I happened not to serve in that Army, I can only answer, according to the Information I have received, that this General was not sufficiently supplied with Ammunition and Provisions, to make it practicable for him to carry on the Siege of *Coni*, and subsist his Army on the other Side of the Mountains. For which Reason it may be very unjust to arraign the Conduct of M. *de Catinat*, in those Particulars.

Hitherto I have pointed out more Errors in the Conduct of our Enemy's Generals, than were committed by those who commanded the King's Armies. But I shall not be able to make the same Declaration, in my Remarks on those Battles that have been fought since the Commencement of the present War. All the unfortunate Events we have experienced, may be imputed to our Generals, as will be easily proved, by a Survey of their Conduct, as well before, as on the very Day of these great Actions.

Gene-

The En.
counters at
Carpi and
Chiari,
1701.

The Encounter at *Carpi* in *Lombardy*, was the first Operation of the War, which began in the Year 1701, and is to be ranked in the second Class of great Actions. It was owing to Chance alone, that the Event was not entirely decisive against the two Crowns, at the first opening of the War in *Italy*; and to make this evident, it will be necessary to represent the Plan of this War, on our Part, with the Particulars that preceded the Action.

The King's general Plan for sustaining the War against the Emperor, and all his Allies, in favour of the Monarchy of *Spain*, which devolved on *Philip* the fifth, was that of a defensive War, as I have formerly intimated. *M. de Catinat*, to whom the Command in *Italy* was confided, received Instructions for his Conduct, which restrained him, too much, in his first Motions; and he was not permitted to oppose the Advance of the Emperor's Forces, when they had marched through the *Trentine*. This Army was commanded by Prince *Eugene*, who advanced into the Plain of *Verona*, beyond the *Adige*, and *M. de Catinat* had Orders not to oppose him in the Territories of the Republick of *Venice* on this Side of that River.

It appears by this Account, that Prince *Eugene* penetrated, with a very powerful Army, into *Italy*, tho' his Entrance might have

have been easily opposed with a manifest probability of Success. M. de Catinat was posted on this Side of the *Adige*, with all his Army; but as his Orders restrained him from the first Act of Hostility, he was obliged to be a peaceable Spectator of the Enemy, when their Foot were defiling from the Mountains, to the *Adige* near *Verona*. The King's Army was separated into several Bodies; part of the Foot were drawn up at *Rivoli*, on the Bank of the *Adige*, above *Verona*, and extended their Post to *Montebaldo*, with no other View than to prevent the Enemy from pursuing their March between the Lake of *Guardia*, and the *Adige*, and from posting themselves afterwards, near *Peschiera* and the *Mincio*. The greatest part of the Horse, and the rest of the Foot, were opposite to *Verona*.

M. de Catinat believed this first Disposition of his Forces would enable him to oppose the first Efforts of Prince *Eugene*, if he either intended to fix his Army at *Peschiera*, or to pass the *Adige* at *Verona*, or else to march over the Bridges near that City; for it was reasonable to imagine the Neutrality of the *Venetians* would be favourable to the Emperor. We were not certain likewise, whether the *Milanese* would, at the first opening of the Revolution in *Spain*, be well affected to its new Sovereign; and this Consideration

made our General think it would be sufficient, if he prevented the Emperor's Troops from entering those Territories, and this, in his Opinion, was to be rendered practicable, by confining that Army to the other Side of the *Adige*. This first Disposition was of no long continuance, because Prince *Eugene* extended his Forces, along the *Adige*, to that part, below *Verona*, which was opposite to *Labadia*. *M. de Catinat* likewise extended his Army, and stretched out his Right to *Sto. Pietro de Laigniago*, and *Carpi*, but without diminishing his Body of Foot at *Rivoli*; because Prince *Eugene* had likewise left a Party of Foot over against *Rivoli*, and who always seemed inclinable to pass the *Adige* at that Place.

The *Adige*, as it's well known, flows to the South, a little above *Verona*, and then turns off directly to the East. This Idea of its Course makes it evident that Prince *Eugene*, as his Troops were then extended, could draw them together much sooner than *M. de Catinat* could assemble his, who had a much longer March to take, before they could all join. The Prince was vigilant to improve this Advantage, and ordered part of his Army to pass the River above *Labadia*, whilst he continued to amuse *M. de Catinat* at *Rivoli*. This Body of Troops, when they had compleated their Motion, were secured

so

so effectually, by the natural Situation of the Country between the *Adige* and the *Po*, that they had nothing to fear, either from our Quarters at *Carpi*, which were too weak, or from those at *St. Pietro de Laigniago*, where *M. de Tessé* was posted with the greatest part of the Horse, and forming a kind of Center, from whence he could advance with equal Facility, either to *Carpi*, or the Parts adjacent to *Verona*, as Occasion should require. This second Disposition made by *M. de Catinat*, seems, to me, to have been ill concerted: His Army was already separated too much; and I am persuaded that a General can never make any effectual Opposition against an Enemy, whose Forces can be all joined in a Body much sooner than his own, and that he will always be in Danger of having his Quarters storm'd, when he separates his Troops in the manner I have represented.

This particular Account of our first Motion, tho' it has not an immediate Relation to the Subject of this Chapter, and has been discussed in another Place, is necessary however, to make it evident, that this Disjunction of the King's Army, induced Prince *Eugene* to attack our divided Troops in their several Situations.

This Prince, the better to accomplish his Design, thought it necessary to amuse *M. de*

Catinat with new Attentions, without diverting those which he continued to employ on *Rivoli* and *Verona*. With this View, he caused a Body of Troops to advance to the *Po*, on a Tract of Ground opposite to *Ferrara*, and ordered a Bridge to be prepared, as if he intended to march his Army over it into the Territories of *Mirandola*, and the *Modeneze*, whose Prince he knew to be well affected to the House of *Austria*; he likewise caused a Body of Horse to march over a flying Bridge and advance to the Gates of *Ferrara*.

This Motion induced *M. de Catinat* to draw his Forces into a greater Extent than they already possessed, and to march a Body of Foot over the *Po*, with Orders to post themselves at *Stellata*, opposite to Prince *Eugene*.

This was the Conjunction which the Prince thought would be favourable to his Project of attacking the separate Bodies of the King's Army. He marched to *Carpi*, with a Party of Troops, and ordered the Prince of *Commerci* to advance with a larger Body of Horse, and plant them between *Carpi* and the *Adige*, about the Time that Prince *Eugene* might be thought to have forced the Quarters at *Carpi*. After which, these two Bodies of Troops might, by their Conjunction, have easily defeated *M. de Tessé*, who was posted at *St. Pietro de Laig-niogo*.

niago. And as this would have compleated the Separation of our Forces, who were then at *Stellata*, and near our Bridge over the *Po*, the Prince was fully persuaded that the King's Army might be defeated in different Attacks, the Consequence of which would have been the Loss of the *Milaneze*, and the rest of *Italy*. This Effect would have resulted from those Motions, which the Disposition of our Army into that immoderate Extent, gave Prince *Eugene* an Opportunity to concert, whilst *M. de Catinat* had no Suspicion of his particular Views.

Every Circumstance on our Part, seemed to facilitate the Execution of this Project: *M. de Catinat* was continually deceived by the false Attentions Prince *Eugene* created in him; our Army was separated into seven or eight Bodies, while Prince *Eugene*, whose Forces seemed to be divided as well as ours, had concerted the Means of their Conjunction in two Bodies, superior to those we could oppose to him. The Elements alone declared in our Favour, and prevented the total Destruction of the King's Army that Day. A prodigious Storm, which rose the Moment Prince *Eugene* began his March, rendered the Country through which the Column commanded by the Prince of *Commerci*, was to pass, so impracticable, that this Body of the Army was obliged to take a Circuit of more

than five Leagues, in order to arrive at their Rendezvous, between *Carpi* and the *Adige*; so that our Troops posted at *Carpi*, were attacked and defeated by Prince *Eugene*, before the Prince of *Commerci*'s Column appeared. By which Means our Troops, at *St. Pietro de Laigniago*, had time to draw together the shattered Remains of *Carpi*, and to mount their Horses, and decamp from *Rivoli* and the Banks of the *Adige*, to the other Quarters near the *Mincio*. But tho' this great Project was not so successful as its Author might reasonably have expected, since it only produced a slight Engagement at *Carpi*, yet it ought not to be the less admired by those who are versed in the Art of War.

This Example presents us with a Plan formed with great Capacity, and judiciously conducted by Motions which were covered with Appearances different from their true Object, but at the same time so plausible, and persuasive, that our General constantly mistook the Disguise for the Reality, tho' he was always in a Condition to have distinguished the certain from the apparent Intention.

The Encounter, tho' very inconsiderable, with Reference to the Loss of Men, was, however, productive of very remarkable Effects. The King's Troops could only re-
assemble

assemble near the *Mincio*, because the Emperor's whole Army passed the *Adige* with all possible Expedition. Our Post even on this side of the *Mincio*, was maintainable only for a few Days, because Prince *Eugene* passed that River near *Monzabano*, and we were obliged to retire behind the *Oglio* and the *Adda*, to prevent the Enemy from advancing through the *Brescian*, into the *Milaneze*; for we were apprehensive at first of an intire Revolution in that State, which was only defended by *Spanish* and *Italian* Troops. Thus did Prince *Eugene* remain Master of all the Country between the *Adige* and the *Adda*, except *Mantua*, where a strong Garrison had been placed.

I have observed before, that M. *de Catinat* had been too much restrained in his first Disposition, by the Orders he received from Court, and that he was not permitted to oppose Prince *Eugene*, when he marched through the *Trentine*, in order to advance into the *Venetian* Territories. This first Error, therefore, which was very great, with Relation to the general Plan of the Campaign, could not be imputed to this General. But then he is not to be vindicated for his Inattention to the first Motions of Prince *Eugene*, after he had marched part of his Army over the *Adige*, and left the other opposite to *Rivoli* and *Verona*.

The Considerations that might have enabled M. *de Catinat* to discover the true Designs of his Enemy, seem, to me, very natural and obvious ; and intirely result from the Disposition of the two Armies. I imagine they might have occurred in this manner. “ Prince *Eugene* can no longer have “ any Intention to pass the *Adige* with all his “ Army, above *Verona*, in order to approach “ the *Milanexe*, through the *Brescian*, since “ part of his Troops have already crossed “ that River, below *Labadia* ; and he has “ even extended his Line to the *Po* : For “ should he attempt to pass the *Adige*, above “ *Verona*, it must be with a very inconsiderable Body of Troops, who are posted near “ *Verona* : For which Reason should the “ Forces I propose to leave at *Rivoli*, be inferior to those who may happen to oppose “ them, the Enemy, even then, will be incapable of forcing that Post ; since I shall “ be in a Condition to reinforce it with a fresh “ Supply of Troops, and consequently shall “ oblige him to discontinue his Design. It “ is therefore unnecessary to guard the Post “ at *Rivoli* with so considerable a Body of “ Foot as is there stationed ; and it would “ be of more Importance, to march part of “ those Foot to the Quarters on the Right “ of the Army, since they will find that “ part of the Country very commodious. “ The

“ The Enemy can never attempt to pass
 “ the *Adige*, between *Verona* and *Labadia*,
 “ because the Banks of that River are effec-
 “ tually guarded, and it will be impossible
 “ for them to prepare a Bridge, without my
 “ receiving Intelligence of their Design, time
 “ enough to oppose it. When I, therefore,
 “ shall see Prince *Eugene* begin to extend his
 “ Troops along the *Adige*, below *Verona*, I
 “ shall have no reason to fear he will have
 “ any real Intention to lay Bridges over that
 “ River, in order to pass it in my View,
 “ while he continues to leave part of his Foot
 “ in their Post, opposite to *Rivoli*. As the
 “ Prince, therefore, has already passed the
 “ *Adige*, below *Labadia*, and has posted the
 “ greatest part of his Army, between that
 “ River and the *Po*; his View must be either
 “ to engage my Attention on Quarters very
 “ distant from each other, that he may the
 “ more effectually separate the King’s Army,
 “ and attack the weakest Body of Troops;
 “ or else to pass the *Po*, and advance into the
 “ *Modenze*, in order to attempt a Revolu-
 “ tion in the Kingdom of *Naples*.

“ It is most reasonable, indeed, to ima-
 “ gine that Prince *Eugene* will endeavour to
 “ act against those Quarters, that are too
 “ weak, on the Right of our Army; for
 “ which Reason it is incumbent on me to
 “ strengthen them with a Body of Foot, be-
 “ cause

“ cause their Service may be successful in a
 “ Country like that; and this Precaution
 “ seems the more necessary, since if Prince
 “ *Eugene* should determine to pass the *Po*, so
 “ early in this Campaign, (which, however, is
 “ improbable, while part of his Army con-
 “ tinues on the other Side of the *Adige*,
 “ above *Verona*) it will be absolutely proper
 “ to reinforce our Troops at *Carpi*, as well
 “ as those who are posted behind them, that
 “ they may oppose the Conjunction of the
 “ Enemy’s Forces, on the other Side of the
 “ *Adige*, with those who have already passed
 “ that River.

This Train of Reasoning did not first oc-
 cur to me since the Engagement at *Carpi*;
 for there are Persons of undoubted Credit,
 who can testify that I disliked the Dispositi-
 on of our Army, several Days before the
 Action, from the meer Apprehension of the
 Consequences that might ensue: And I then
 declared, that when a General has it in Com-
 mission to observe the Motions of an Ene-
 my, by whose Conduct he is obliged to re-
 gulate his own, he ought to examine with
 the utmost Strictness, the least Circumstance
 of those Motions; he should consider how he
 himself would act, were he the Enemy, and
 perfectly acquainted with your Disposition,
 and the Advantages that may be derived from
 its Imperfection. When a Conduct like this
 is

is justly pursued, a General is not easily betrayed into any Snares that an experienced Enemy can be capable of framing.

The second Event of this Campaign in *Italy*, was the Encounter at *Chiari*, which is to be referred to the second Class of great Actions. We attacked, on this Occasion, a very commodious Post, which the Enemy had formed at the Head of their Army, tho' we were unacquainted with the Importance of that Situation. Such a remarkable Circumstance as this, makes it evident that this Enterprize would not have redounded much to our Advantage, tho' it had been executed with all imaginable Success. The Fact is as follows.

The two Crowns had constituted the Duke of *Savoy* Generalissimo of both their Armies; and there was reason to believe, that this Prince maintained, from that time, a secret Correspondence with Prince *Eugene*, to whom he communicated all the Motions, and Dispositions of our Army. As the Court was then dissatisfied with the Conduct of *M. de Catinat*, not only for his former Dispositions which occasioned the Affair at *Carpi*, but likewise for his precipitate Marches, in order to post himself behind the *Oglio* and the *Adda*; the King appointed the Marshal *deVilleroi* to command the Army in *Lombardy*. This General was desirous, at his Arrival,

to

to distinguish himself by some Exploit capable of reanimating the Troops, whom the retreating Marches of *M. de Catinat*, had, in some measure, discouraged. And tho' *M. de Catinat* had imparted to him, the just Reasons he had to suspect the Probity of the Duke of *Savoy*, yet this new General concerted Measures with that Prince, for attacking a small Body of Foot which the Enemy had posted at *Chiari*, in the Front of their Camp. This Project was intirely vain and insignificant; since the Execution of it would not have secured any Advantage to the Army, in that Conjuncture. Prince *Eugene* had early Intelligence of our Design, as well as of our Disposition, which made him prepare to render this Attempt very destructive to our Troops, and he succeeded to Admiration. We had a vast Number of Men killed, and after we had persisted in the Action, as long as the Duke of *Savoy* judged it necessary, for the Augmentation of our Loss, we found our selves obliged to retreat, without having, through the whole Engagement, a Moment's Prospect of a fortunate Event; so well was Prince *Eugene* prepared to receive us.

I ought not to omit one very remarkable Circumstance, which I was informed of by several Persons who were present in this Engagement, and it is this. The Duke of *Savoy* behaved with peculiar Bravery, through
the

the whole Action, which alone would have been sufficient to manifest his Integrity, if, in other Instances, he had not given us full Convictions of his Insincerity and perfidious Disposition.

I shall now draw some Reflections of a contrary Nature, from these two Engagements at *Carpi* and *Chiari*. Every Circumstance in Prince *Eugene's* Project at *Carpi*, was truly great, and concerted with such a Sagacity, as made it tend to the Decision of a War, which was then in its first Operations, and whose Commencement might have almost been rendered impossible. This admirable Event must be entirely ascribed to that Strength of Genius, in which Prince *Eugene* was so superior to *M. de Catinat*. In the Action at *Chiari*, every Particular of *M. de Villeroi's* Conduct, was mean and unmasterly; since our Possession of the Post at *Chiari*, could never have produced any considerable Effect; nay, it would have been impossible for us to have preserved it, had we wrested it from the Enemy in that Engagement, because it was too near the Front of their Camp. Prince *Eugene*, by divesting us of the single Post at *Carpi*, secured such Advantages as seemed to threaten the united Army of the two Crowns, with inevitable Destruction, and opened to him, at the same time, a favourable Prospect of conquering all *Italy*.
This,

110 M E M O I R S

This, indeed, may be called a deep Penetration of Thought. *M. de Villeroi*, on the contrary, when he attacked the Post at *Ghiari*, never turned his Attention to any solid Advantage, that might enable him to dislodge Prince *Eugene* from the Frontiers of the *Milaneze*, and was as little sollicitous to secure any Conveniencies that were necessary in his Situation.

The Encounter of the following Year 1702, near the *Croftolo* in *Lombardy*, is likewise to be ranked under the second Species of great Actions. *M. de Vendôme* commanded his Majesty's Army, under the King of *Spain*, who was then present. The joint Forces of the two Crowns, after they had raised the Blockade of *Mantua*, on this Side of the *Po*, and taken *Vercelli*, advanced towards the lower *Po*, to cut off the Communication which Prince *Eugene* had established with the *Modeneze*, and *Mirandola*, by the means of Bridges which he had laid over the *Po*, and by a Post he had secured at *Rovero*. This Prince, who was then in *Seraglio*, with his Army, detached three thousand Horse, who advanced to the *Croftolo*. The Banks of this River or Torrent are very incommodious and steep, and this Circumstance induced the General Officer, who commanded that Body of Horse, to imagine he might safely

HISTOTICAL *and* MILITARY. III

safely post himself there against the Forces, who were then advancing to that River. But this inconsiderate Proceeding gave our Troops sufficient Time to examine the Banks of the *Croftolo*, below the Front of that Party of Horse; and they, at last, found a Place that was practicable; they passed the Stream, and entirely defeated the Enemy.

There was nothing remarkable in this Event; and the Reflection I have to make, will be only a Reperition of what I have already observed, with Relation to the Risque an inferior Body of Troops sustain, when they post themselves too near an Army which is advancing to them: For the least Engagement which they can have the Temerity to hazard with an Enemy of superior Force, is immediately communicated to the whole Body, by the Vivacity of the Invaders; and then, even Flight it self will not disengage them from the Danger.

The Battle of *Luzara* in *Lombardy*, which was fought a few Days after the Encounter at the *Croftolo*, is an Action of the first Species: And tho' the two Armies did not charge through the whole Extent of their Fronts, they were, however, both engaged in the Battle. The King of *Spain* was there in Person, and the Army was commanded, under him, by the Duke of *Vendôme*.

The Battle
of *Luzara*,
1702.

After

After the Action at the *Croftolo*, the King's Army marched to *Luzara*, and the Bridges which the Enemy had on the *Po*, with an Intention to cut off all their Communication with *Mirandola* and the *Modeneze*. As they had several Rivers and artificial Canals to pass, they began their March with all proper Precaution, and in as many Columns as they could possibly form. A Body of Horse was ordered to advance before the Army, to give Intelligence of what they discovered. We had not received any Information that Prince *Eugene* was in Motion; and we believed him to be then in *Seraglio*, as he was when we approached him from *Mantua*. But this Prince had passed the *Po*, with the greatest part of his Army, and was then posted between that River and the *Zero*, and so well covered by the Dike of *Zero*, that we had no Suspicion of his being so near us with his Army; because when our March was almost compleated, the Officer who commanded the Body of Horse that advanced before the Army, had not the Curiosity to ascend this Dike of *Zero*, behind which the Emperor's whole Army was ranged in Array of Battle. This Negligence was too great, in such a Conjunction, and should serve as a Warning, for the Prevention of the like Inconvenience.

When

HISTORICAL *and* MILITARY. 113

When the King's Forces, who continued their March, and consequently were still form'd in Columns, were preparing to enter their Camp at *Luzara*, they immediately beheld themselves under the Fire of the Enemy's Foot, who had been regularly drawn up, below the Reverse of the Dike, and only needed to ascend it in order to fire. We were obliged, therefore, upon our Arrival at our Camp, to form our selves in order of Battle, and engage the Enemy. Several Hedges rose between the Front of the Army and the Dike, so that it was impossible for the Lines to charge in Front. The Enemy, however, attempted, in several Places, to advance up to our Battalions, but without any Success. The Horse to our Right, had an open Country before them, and they had some Encounters, tho' with very little Effect, because the Enemy saw that the Attack in Front would not be so successful as they could wish, and that the Horse of our Right, who, in their March, had advanced a little too far beyond the Columns of Foot, had, at that time, recovered their Ground, and form'd a Line to the Right of the Foot. This Battle, therefore, was fought without any apparent Advantage on either Side. Our Army, however, encamped within Cannon shot of the Enemy, without perceiving them, because they were posted behind the Dike;

and we entrenched our Camp, with an Intention to make our selves Masters of *Luzara* and *Guaftalla*, which lay in the Rear of our Left ; and we accordingly took those Places, and consequently decided the Advantage in our Favour, since the Enemy continued several Days in their Post, without making any Attempt to preserve *Guaftalla*.

This Project was the Result of a noble Imagination in Prince *Eugene*, and would have been compleat in all its Parts, had the Execution proved as fortunate as the Plan was judicious; and indeed, the King's Army was preserved in this Conjunction, by a Circumstance that was purely accidental, and which it was impossible for Prince *Eugene* to foresee. This Circumstance was of such Importance to our Troops, that it merits a particular Relation.

The Emperor's Troops, as I have already observed, lay concealed behind the Dike of *Zero*, and Prince *Eugene*, who had not been discovered by the Body of Horse that marched before the rest of our Forces, because they halted at the Front of the Camp, without extending their View any farther, was now very near our Army, who had not any Suspicion of his Situation. The Prince, therefore, concluded, that our Troops, upon their Arrival at their Post, would lay down their Arms, and form their Camp, and that the

Horse would afterwards march out to forrage, while the Foot would be providing for their Refreshment; and that if he improved this favourable Opportunity, by advancing to the Front of our Camp, he should be able to seize all our Arms, and a considerable Number of our Horses, upon which the entire Destruction of our Army would have been inevitable.

This Project was conducted to the very Point of Execution, and Prince *Eugene* was only waiting for the happy Moment, when he was discovered, by a meer Effect of Chance, time enough for our Evasion of the Danger, and before the Foot had dispersed themselves to provide for their Accommodations.

The Accident to which we owed our Preservation, was this. The Dike of *Zero* is not extended in a direct Line, for as it forms the Canal that flows from the *Po*, above *Seraglio*, to another part of the same River, at *Rovero*, it was necessary to make it correspond with the Level of the Land; and it was carried on so near the Front of our Camp, that one of our Adjutants thought it the most commodious Post for a Party of Soldiers, who were to form the Out-Guard of the Camp. This Officer therefore, as he was advancing with his Guard, in order to station them, had the Curiosity to ascend the

Dike, to take a View of the Country beyond it; and then saw all the Enemy's Foot lying with their Faces on the opposite Declivity of the Dike, with all the Horse in their Rear, ranged in Order of Battle. This Discovery alarm'd our Camp through the whole Line, and they immediately caught up their Arms, to oppose the Enemy, who, as I intimated before, were separated from them by a Tract of Land covered with Hedges, which obliged them to defile. But this Discovery did not prevent them from advancing to us, in hopes of disordering our Line in so many different Parts, that we should be in no Condition to render their Design ineffectual. But they were defeated in their Expectations, as I observed before, and were incapable of marching up to any part of the Front of our Camp.

This Account furnishes me with several important Remarks. The first of which is, that a General should never march, or form any other Motion, without a previous Examination of all the Means to accomplish that March, or those Motions, with every requisite Precaution. *M. de Vendôme* was marching against a wise, a vigilant, and experienced Enemy, who was enabled, by the natural Situation of the Country, to conceal his Motions from our View. *M. de Vendôme* therefore should not have contented himself with beginning his
March

HISTORICAL *and* MILITARY. 117

March in a cautious manner, but ought to have concluded it with the same Circumspection. The most vigilant of all his General Officers should have been charged with the Command of those Troops, who were not only to endeavour at some Discovery of the Enemy's March, but were, likewise, to provide for the Security of the Camp, till the Guards could be properly posted, and even till the Return of the Forragers. But these Precautions were not observed; for when our Troops arrived at the Tract of Ground where they had determined to encamp, this detached Body had not made any Advance either to examine the Dike, or survey the Country that lay behind it.

My second Observation is, that when an Army arrives at the Situation where they intend to form their Camp, they ought not to lay down their Arms, till the Guards are properly stationed, and especially when the Country to the Front of their Camp has not been sufficiently visited and surveyed.

The third is, that an Army may happen to be surpris'd at their Entrance into their Camp, when the Enemy has approached by such Motions as were undiscovered, and when the Country affords him a Situation where he may lie concealed, either in the Front, or Flank of the Army.

A General, therefore, should neither march
I 3 without

118 M E M O I R S

without due Precaution, nor form his Camp, till a proper View has been taken of the adjacent Country; and should be for ever careful to avoid an Engagement, till he has had sufficient time to make the necessary Dispositions for such an Action. Our Negligence in these Particulars, might have been fatal to us, at *Luzara*, had not the Accident I have mentioned, presented the Enemy to our View.

The Battle of *Fridlinguen*, 1702. The Action at *Fridlinguen* has been dignified with the Name of a Battle, tho' it was properly no more than a great Engagement of Foot and Horse, since both those Bodies fought separately. The Particulars are these.

Marshal *de Villars* having been detached with a Body of Troops, from the King's main Army in *Alsatia*, to defend a Work raised for the Security of the Bridge of *Hunningen* which the Enemy seem'd disposed to attack, form'd his Camp on this Side of *Hunningen*, and near enough to protect the exterior Work, and with a View to improve the Enemy's Decampment to the best Advantage in his Power, should that Conjunction happen.

The Enemy's Forces were encamped in a Plain that extended between the *Rhine* and a Mountain opposite to the Work that covered the Bridge: Their Left was near the

the Territory of *Bale*, and their Right was stretched out towards the Village of *Fridlinguen*, in the Front of which was a large Redoubt built since the War began, to secure the Country against the Excursions of the Garrison of *Hunningen*.

In this Disposition of our Troops, and those of the Enemy, *M. de Villars* was attentive to the manner in which the latter would decamp, when he should be preparing for his Winter Quarters.

The Enemy, therefore, neglected the necessary Precautions when they decamped, through a Persuasion that they might form that Motion, without any Apprehensions of being pursued in their Retreat; and that they should soon be at a secure Distance from an Army who must pass the *Rhine*, on a single Bridge, in order to be vigilant enough to incommode their Rear Guard. They likewise proposed to march their Foot on the rising Ground behind their Camp, and the Horse were to advance on their Right, and pass through the Defile of *Fridlinguen*, which was fronted by the Redoubt I have already mentioned.

When the Enemy began to form this Motion in the View of *M. de Villars*, this General gave Orders for his Army to pass the *Rhine*; which they accordingly did, with all possible Expedition; after which he divided

them in the same manner as he had seen the Enemy's Forces disposed, when they began their Retreat. The Foot marched, under the Command of M. *Desbordes*, to the Eminence on which the Enemy's Foot were in Motion; and as these did not wheel about to oppose our Forces who ascended the rising Ground with great Difficulty, they soon beheld their Rear Guard approached by our Foot, who marched with such immoderate Vivacity, that they were obliged to halt, till they could recover Breath.

Had the Enemy advanced to our Battalions, while they were thus incapable of defending themselves, they, in all Probability, would have been victorious; But M. *de Villars*, who had entertained just Apprehensions of this Inconvenience, marched thither in Person, and gave the Foot sufficient Time to form themselves in order. The two Bodies, however, did not charge in a Line; our Foot advanced very near those of the Enemy in their Retreat, but could not bring them to engage in Front; and therefore, it can't be said, that they were defeated. The Engagement between the Horse, was much more decisive, partly through the Neglect of the Officer, who commanded the Enemy's Troops, and partly through the Prudence and Capacity of M. *de Magnac*, who commanded the King's Forces in this Action.

As

As the Conduct of this General Officer appears to me to have been very judicious, and well concerted on this Occasion, I shall be as exact as possible, in relating the Particulars, since they may hereafter tend to the Instruction of my Son. I have already declared, that the Plain where the Enemy had encamped, extended to the Village of *Fridlinguen*, the Avenue to which, formed a considerable Defile fronted by a Redoubt, where the Enemy had planted Cannon, and posted a Body of Foot. The General Officer, who commanded the Enemy's Horse, imagined, when he began his March, that his Troops would have sufficient Time to pass the Defile, before they could be overtaken by ours, who at that time had not compleated their Passage over the *Rhine*. But he was deceived in his Expectation, by the Vigour of our March, which was so extraordinary, that the Enemy were obliged to recall those of their Troops who had entred the Defile, and to form themselves in order of Battle, to receive our Horse, who were advancing to charge them. This Body of the Enemy's Horse, might have been disposed in such a manner, as to have had their Right covered by the Redoubt, and their Left might have been supported by an inclosed Country, that was impracticable for the Horse, who were at the bottom of the Eminence on which the
Enemy's

Enemy's Foot pursued their March. The Enemy by this Disposition, might have formed three or four Lines of Battle, and have sustained the Charge of our Horse, whose Left would have been exposed to the Fire of the Foot and Cannon of the Redoubt, before they could be capable of engaging.

M. *de Magnac*, by a Motion peculiar to the Genius of an experienced Officer, effectually disconcerted the Disposition into which the Enemy might have formed themselves, and made them lose all the Advantage that would have resulted from it. When the Troops were on the Point of Action, he discovered a seeming Fear to engage, and caused the first Line to file off behind the second, as if he intended to retreat with the greatest Precaution. The Enemy, elated at their superior Force, grew persuaded that this Motion of M. *de Magnac*, proceeded from his Fear to begin an Engagement with an Army, whom he only intended to incommode in their Retreat, when he found their Front engaged in the Defile; and upon this Presumption they lost the Advantage of their Disposition. Our General then advanced, and, at the same time, form'd an Opening, to give his Troops an Opportunity of doubling the first and second Line. This Motion could not be accomplished without considerable Danger, so near an Enemy,
who

who discovered such Impatience to engage; but M. *de Magnac* very judiciously improved this Warmth of theirs to his own Advantage. The Moment the Enemy had disconcerted their Order of Battle, and, by extending their Right, lost the Advantage of being protected by the Fire from the Redoubt, he charged them so opportunely, that he pushed their first Line upon the others, that were not intirely formed, and drove them into the Defile, in the utmost Confusion, without any Apprehensions of the Fire from the Redoubt, which could not then be directed against us, because it would have been equally fatal to their own Troops, who were intermixed with ours.

This Account of the Battle of *Fridlinguen*, furnishes me with a Reflection of a different Nature from that which I made on the Battle of *Luzara*, and it is this: An Army may be easily defeated, when they decamp near their Enemy, and imagine they can safely retreat, tho' they have not taken the Precautions requisite in such a Conjuncture. For it is certain, that if the Enemy's Foot, instead of ascending the rising Ground directly behind their Camp, had possessed the Eminences on their Right, and where they would have been in a Condition to protect their Horse, till their Rear Guard had entirely entered the Defile at *Fridlinguen*, the Horse
would

would then have been supported on their Left, by the Foot, and on their Right, by the Redoubt, and consequently it would have been impossible for our Horse to have come to an Engagement with those of the Enemy. Or if the Enemy's Foot, instead of chusing that rising Ground for the Convenience of their March, had only decamped before Day, and advanced along the Foot of the Mountain, to the Left of the Defile at *Fridlinguen*, our Foot could never have had sufficient time to join them, and consequently their whole Army might have retreated without any Molestation. The Presumption therefore of the Enemy, in ordering their Horse to advance, and their Neglect of the Precautions necessary to secure their Decampment, were the sole Causes of their Loss.

The Battle
of *Spires*,
1703.

As it is almost impossible to discover a perfect Similitude in any two Operations of War; and tho' I have only distinguished the great Actions into two Classes; namely regular Battles, and great Encounters, the Effects of which last are as considerable as those that result from regular Battles; yet the Battle of *Spires*, which was fought in the Year 1703, and gained by *M. de Tallard*, is of so peculiar a Species, that it ought to be considered with Attention, in order to make it evident, that the Conduct which was then pursued, ought never to be imitated for the future.

The

HISTORICAL *and* MILITARY. 125

The King's Army commanded by M. *de Tallard*, had formed the Siege of *Landau*, and the Town began to be distressed, when the Enemy's Forces, having passed the *Rhine* just below *Spires*, advanced to give Battle to M. *de Tallard*. Our General not being disposed to wait for the Enemy in his Lines, (in which he acted with Judgment) drew off all his Army from the Town, except a Body of Men to guard the Trenches, and marched to the Enemy who had then passed a Branch of the *Spierbach*, and were already form'd in order of Battle.

M. *de Tallard*, before he advanced to engage the Enemy, should have changed his Conduct in two Particulars. The one, that instead of marching his Army from the Lines, in a Column, till he came in view of the Enemy, he should have disposed his Troops in Order of Battle. The other, that when he had compleated that Disposition, he ought not to have marched up to the Enemy, till he had been joined by M. *de Pracontal*, who conducted a considerable Body of Troops that came from the most distant Post at the Siege. But these two Precautions were equally neglected by M. *de Tallard*. He advanced in a Column, to charge an Enemy ranged in order of Battle, which turned the Beginning of the Action so much to our Disadvantage, that M. *de Tallard* was in danger of being intirely defeated, without any Resource.

But

But as our Enemies were not prudent enough to improve this Error, and the Disorder it occasioned in our Troops; and had neglected to advance their Left to the Tract of Ground where we might have posted the Front of our Right, had we been disposed in Order of Battle; our Foot to the Left, who were always in a Column, renewed the Attack with so much Vigour, that they opened the Enemy's Line of Foot, who were regularly drawn up. This Attack therefore having forced the Enemy's Front to retreat, our Foot form'd a more extended Front, and were so advantageously posted for firing, that they obliged the Enemy's Horse on the Left to quit their Ground. This little Advantage gave our Horse to the Right an Opportunity of forming themselves in a Line with the Foot, upon which this small Front renewed the Charge with Success, and disordered all the Enemy's Left to such a Degree, that they drove promiscuously upon the Right, and involved them in the same Confusion; because our Left being, at the same time, a little improved in their Disposition, began likewise to form a Front on the Line. After which, the Enemy's Horse being pressed by ours, abandoned their Foot, who were almost entirely destroyed. This inconsiderate Disposition of our Troops, tho' the Event proved so favourable, ought never to be

be imitated, and a General who commits so gross an Error, is not the more excusable, because he happens to be successful; since his Victory, instead of being the accidental Effect of Fortune, should result from a proper Disposition, which always ought to influence the Success of Military Operations.

The Shortfightedness of M. *de Tallard*, which reduced him to the sad Necessity of directing his View by the Eyes of another Person, gained him this Battle, by the very Mistake that ought to have lost it. The Circumstance is too remarkable to be omitted. The Marshal confided in the strong Sight and Experience of M. *de Vaillac*; whom he had ordered to inform him of the Enemy's Disposition. This Officer took it for granted, that a Motion which the Left Wing of the Enemy's Horse made, in order to extend themselves, and charge our Front to the Right, was the Effect of Fear, and advised M. *de Tallard* to order our Right to begin the Attack that instant, tho' they were not then form'd in Order of Battle. It happen'd fortunately for us, that this Attack opened the Enemy's Front, as I observed before, and their left Wing, instead of wheeling about, and charging our Right in Flank, fell back upon their Center and Right, where they communicated the Disorder into which they themselves had been thrown. Our Left likewise

wife committed a great Error; they were led by *M. de Pracontal*; and when they advanced to charge the Enemy's Right, they neglected to extend their Line to the *Spirebach*, so that when they were preparing to engage, they were obliged to sustain the Fire of some Battalions that covered the Enemy's Right Flank, and were posted on the Bank of that River; and they found themselves so extremely gauled by the Shot of those Battalions, that they were forced to fall back to retrieve their Disorder.

The Events that succeeded this fortunate Battle, have sufficiently evinced the Necessity of employing such Generals are capable of giving a good Disposition to the Actions they undertake, and which has been unhappily neglected in the King's Affairs, from that Time.

The Battle of *Hochstet*, 1704. The Battle of *Hochstet* (*a*), which we lost in the Year 1704, must be ranked in the first Class of great Actions, and it succeeded the Battle I have been describing.

(*a*) *Hochstet* is a considerable Town in *Germany*, in the Circle of *Suabia*: And rendered famous to all Posterity, by the glorious Victory obtained in its Neighbourhood, over the joint Forces of *France* and *Bavaria*, by the *English*, *Imperial* and *Dutch* Arms, under the Conduct of the Duke of *Marlborough*, and Prince *Eugene*. It is situated on the North Side of the *Danube*, 29 Miles South-west of *Ulm*, and 10 Miles West-by-South of *Donawert*. Longitude 32. 39, Latitude 48.

This

This fatal *Æra* to *France*, has produced such unhappy Consequences, as make it necessary for me to give my Son a distinct Idea of all the previous Circumstances, before I relate the Particulars of the Battle; that he may comprehend the Importance of a just and regular Disposition, and the Necessity of conducting Events with solid Judgment, and deliberate Reflections, in order to render them as prosperous as human Prudence may judge they will prove, when they result from wise Measures.

To make my Reflections the more intelligible, I shall give a summary Account of the State of the King's Affairs in *Germany*, before this Battle. The Elector of *Bavaria* was in the Interest of the two Crowns, and sustained a War as well in his own Dominions, as in the Heart of *Germany*, against the Emperor, and the Princes of the Empire, who had declared against him, for no other Reason than his Refusal to enter into the League against *France* and *Spain*. As this Prince must have been soon overwhelmed, had he been only supported by his own Forces, the King of *France* assisted him with a Body of 25000 Men, under the Command of Marshal *Villars*. While this General continued in *Bavaria*, the War was carried on with Success on several Occasions, but, to the Misfortune of *France*, a Misunderstanding was

created between the Elector and Marshal *Villars*; and this Prince made such pressing Instances to have the Marshal recalled, that the King thought it necessary to comply with his Desires. Marshal *Villars* was succeeded in that Command, by Count *Marfin*, whom the King had raised to the Dignity of a Marshal of *France*, tho' he was one of the youngest *Lieutenant* Generals, and had only commanded 500 Horse. This Event happened at the close of the Campaign in 1703, which prevented the Effect of this Change from being immediately perceived. But the Emperor and his Allies having, the next Year, resolved on vigorous Efforts to crush the Elector of *Bavaria*, they assembled all the Forces of the Empire under Prince *Eugene*, and the greatest part of the *English* and *Dutch* under the Command of the Duke of *Marlborough*, in order to attack the Elector in his own Dominions. The King of *France* seeing this great Storm ready to burst on his Ally, assisted him with a new Army of 30000 Men under the Command of Marshal *Tallard*; so that the Armies were almost of equal Force, and consisted of about eighty thousand Men.

As my Observations are entirely confined to Battles, I shall not mention the Errors that were committed before, and after the Action at *Hochstet*, any otherwise than as they may

may be necessary to clear up the Particulars which contributed to the Loss of that Battle, by their Contrariety to the Rules I have offered on this important Subject.

I must begin, therefore, with observing that the Enemy, some Days before the Battle of *Hochstet*, had forced the intrenched Camp at *Schellenberg* near *Donawert*; and afterwards took that City, where there was a Bridge over the *Danube*. The Places on this River, both above and below *Donawert*, were possessed by the Elector, whose whole Army, except the Garrisons of those Places, and a Body of Foot intrenched under *Ausburg*, was then assembled, in Conjunction with the King's Forces, under the Command of the Marshals *Tallard* and *Marfin*.

The Enemy, tho' they were Masters of the Bridge over the *Danube*, found it impossible to establish themselves in the Electorate of *Bavoria*, because they could not have subsisted there for any considerable time, without advancing farther into the Country, which would have placed them at too remote a Distance from their Bridge, as well as their Provisions, which they could receive from no Place but *Nurenburg* or *Norlingen*, where their Magazins of Corn were deposited. Their Convoys could not pass from *Nurenburg* to *Donawert*, without great Difficulty, because they would always have been in

Danger of being seized by the Troops who were posted in the Upper *Palatinate*, and the Places on the *Danube* below *Donawert*: And it would have been more difficult to secure their Supplies from *Norlingen*, because, when their Army had once passed the *Danube*, we could easily have destroyed their Magazins in a Town that was unfortified. It was necessary therefore, for the Army to protect those Magazins. It appears then, that their Supplies from *Norlingen* were not so easily attainable as those from *Nurenburg*, because they were obliged to guard their Magazins in that City, which, for want of that Precaution, might be seized without much Difficulty, and their Convoys of Bread could not be conveyed to them, from that Place, without great Hazard.

These Reasons make it natural to conclude, that our Generals could not have any good Inducement to engage an Enemy, who would soon have been obliged to quit the Banks of the *Danube*, for want of Subsistence; and that they should rather have compelled them to retreat to *Nurenburg* or the *Mein*, by making it difficult, and even impossible for them to receive their Convoys, while they continued near the *Danube*. It was imprudent, therefore, to be desirous of a Decision by a general Action, at a time when a little Patience would have rendered us Masters of all *Germany*,

HISTORICAL *and* MILITARY. 133

many, between the *Mein* and the *Danube*, after the Retreat of the Succours which the Duke of *Marlborough* had poured into that Country. But the evil Destiny of *France* elated our two Marshals with so much Presumption and Pride, that without reflecting on the Reasons I have alledged, and which ought to have dissuaded them from any precipitate Measures, in that Conjunction, they advanced with their Armies to the Village of *Bleinheim* (b) near the *Danube*.

The Enemy, who were daily more necessitated to come to an Engagement, for the Reasons I have already mentioned, with Relation to their Subsistence, and who were sensible they must continue but a few Days, near the *Danube*, began to advance, with an Intention to observe whether our Motions, or Situation, would make it practicable for them to attack our Army.

We were then encamped with our Right cover'd by the *Danube*; the Village of *Bleinheim*, which lay at a little distance from that River, was in the Front of the Line; another Village (c) in a Plain, lay a little be-

(b) BLEINHEIM, or PLENTHEIM, a Village in *Germany*, in the Circle of *Bavaria*, upon the Confines of *Suabia*. It stands on the North Side of the *Danube*, and has on the North-East Side of it, a very small Rivulet called the *Meul-Weyer*. It is three Miles almost East from *Hochstet*, nine West-South-West from *Donauwert*, 30 North-East from *Ulm*, and 31 North-West from *Ausburg*. Longitude 32, 30. Latitude 48, 44.

(c) The Village of *Lutzingen*.

yond the Center of our Left, and a Rivulet flowed along the whole Front of our Army, very difficult to be passed, and even impossible, in the Presence of such an Army as ours, had our Order of Battle permitted us to make a proper Approach to it. But the most extraordinary Circumstance of our Encampment was, that tho' our two Armies were posted with the same Front, and that according to my Maxims, an Army should always incamp in the same Form it would assume in a March or an Engagement, they yet encamped like two Armies entirely separated, and the Right and Left Wings of the Cavalry of the two Armies formed the Center of the Camp. The Enemy were posted on the other Side of the Rivulet, with the *Danube* to their Left, their Front was covered by the Rivulet, and a Growth of Hedges, which concealed their Motions from our View; and a Wood fronted their Right.

The Day before the Battle, the Enemy (whose Motions, as I have intimated, we were incapable of discovering) perceiving, by the manner in which we had form'd our Camp, that we had no Intention to oppose their Passage over the Rivulet, before the Front of our Right, were attentive to form their Order of Battle, in such a manner as was most likely to improve our injudicious Disposition to their Advantage. It was easy
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for them to conceal from our Observation, all their Motions to their Left, and before their Center, because we were not at all solicitous to discover them. It was difficult for them to be as secret in the Motions of their Right, and yet they even concealed these, by posting a Body of Foot in a Wood which covered them on that Quarter.

Our two Marshals, who advanced to this part of the Country, from no other Motive than a vain Impulse of Presumption, were so transported with the imaginary Merit of this Motion, that they only considered the Foot who were stationed in the Wood, as a Body of Forces placed there to cover a March, which these sagacious Generals thought the Enemy would take the next Day to *Norlingen*, in order to be near their Provisions, or to secure a Convoy of Bread. And their Approach to *Bleinheim*, gave them so much Satisfaction, that they were persuaded this Motion alone would chase the Enemy from the *Danube*, and never entertained the least Conception that the Foot were posted in the Wood, to cover and support the Enemy's Right, the next Day, when they intended to attack us. Our Generals, therefore, suffered part of the Cavalry to march out upon a Forage, the next Morning, and were as little attentive to any Motions the Enemy might have formed in the Night, as if they

had been in a Place of perfect Security. The very first Motions which they saw made by the Right of the Enemy's Horse, in order to form themselves before the Wood, were at first taken for the Disposition of a Body of Horse, who were appointed to cover the Army's March to *Norlingen*. To such a Degree were our Marshals prepossessed with an Opinion, that the Enemy, being in no Condition to attack them, because they were posted to so much Advantage, were obliged to decamp from the *Danube*, in order to secure a Subsistence near *Norlingen*.

While they were thus indulging an infinite Satisfaction and Tranquillity of Mind, at the Thoughts of the Glory they had acquired, by obliging the Duke of *Marlborough*, and Prince *Eugene*, to make a distant Retreat from *Bavaria*; they unexpectedly beheld the Enemy's Right advancing against us. Our Forces, who had taken to their Arms, and were only form'd in order of Battle, at the Head of our Camp, received the Enemy's Charge, not only with Vigour, but even overwhelmed their Right Wing, and drove them back to the Wood, where they rallied under the Fire of the Foot, who were posted there. The Enemy attacked us a second time, but with as little Success; and these two Charges of their Right against our Left, were made before any Appearance of Action

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on our Right; because the Enemy were employed in passing the Rivulet, and they completed that Motion without being perceived by the Troops to our Right, because, our Disposition placed us at a Distance from that Stream.

I have already observed, that our Forces, when they first took to their Arms, were only ranged in Array at the Head of our Camp, in the same Order that was observed in the Encampment of our two Armies; by which means the two Bodies of Infantry were separated by the Right and Left Wings of the Cavalry of the two Armies. It is evident therefore, that the Center of those Armies was form'd in one and the same Front, by the Cavalry which possessed the Plain between the Villages of *Bleinheim* and *Lutzingen*, and was extended, from this last Village, to the Elector's Infantry.

Besides the Inconsistency of this odd Disposition, we committed another Error, in posting the greatest part of the Infantry in the two Villages, so that the Cavalry were almost the only Body of our Forces in the Plain, while the Infantry were rendered incapable of forming any Motion.

The Enemy who observed our bad Disposition in our Order of Battle, and to whom we had left a free Passage over the Rivulet, improved our Misconduct, to their own Advantage,

vantage, as fast as possible, and passed all their Foot over that Rivulet, who by the continuance of their March, gave their Cavalry an Opportunity of accomplishing the same Passage, and of forming themselves in several Lines behind the Infantry.

This Order of Battle was concerted with great Judgment, tho' its Aspect was a little peculiar; for as our Infantry made so inconsiderable an Appearance, because the greatest part of them were posted in the Villages which were too distant from each other, to make it practicable for them to fire in a cross Directions; the Enemy judged that our Cavalry, who were stationed between the two Villages, would be incapable of sustaining the Fire of their Infantry supported by the Lines of their Cavalry, and therefore, that when they had thrown our first Line of Cavalry into Disorder, and forced them back upon the second, they should oblige us, by that single Charge, to abandon the Infantry who were posted in the Villages; because they could then advance with their whole Front between those Villages, and could drive our Infantry from their Stations in those Places, behind the Lines of Infantry, who were drawn up in the Plain.

The Enemy advanced in this Arrangement, against our Front of Cavalry, without the least Opposition, because Marshal *Tallard*,

who had not observed any Motion of the Enemy, towards his Right, was gone to take a View of what passed on the Left, and the Generals of his Army durst not take upon them to disconcert the Line, and draw the Infantry from the Villages, to charge the Enemy who were forming themselves in the Front of those Generals; but as they had not completed their Disposition, might have been easily overwhelmed in the Rivulet, and especially the Cavalry who passed it in separate Bodies. But the Enemy, before the Return of Marshal *Tallard* from the Left, had charged his great Front of Cavalry, in the Disposition I have described, and the Fire of their Foot had overturned our two Lines of Cavalry, beyond the Villages in which part of our Infantry were shut up. The Cavalry of Marshal *Tallard's* Army, who composed the Left of our grand Front, that had received the Enemy's Charge, fell back on their Right, as that of the Elector's Army fell back on their Left; so that the two Armies were separated by this Motion, and the Enemy remained Masters of the Interval of Ground between them, which was the very Spot on which our Cavalry had been disposed in Order of Battle, before they were attacked. Marshal *Tallard*, who has the Misfortune to be very short sighted, returning with all speed, from the Left, when he
heard

heard the firing on the Right, was taken Prisoner by the Enemy's Cavalry; who had advanced between the two Villages; and from that Moment an universal Confusion was diffused through his Army.

The Marshal *de Marfin*, who commanded under the Elector, and had attacked Prince *Eugene's* Right Wing, several times with Success, being apprehensive that his Army would be charged in Flank, by the Enemy's victorious Left, at the same time that he should be attacked in Front by their Right, endeavour'd to make his Retreat to *Ulm*, without thinking on a particular Motion easy to be accomplished, which was to file upon the Right, and charge the Flank of the Enemy, who had advanced beyond the Villages. By an Action of this Nature, he would either have drawn off, or supported the Infantry who were in those Villages, and have given the disordered Cavalry of Marshal *Tallard's* Army time to rally, and reform themselves into Order of Battle, either behind, or in the same Line with the Wings of the Elector's Army, and consequently might have re-established, or even gained the Battle; but as this General was too inexperienced to think of such a Motion, he retreated with his Army to *Ulm*, and abandoned the Army of Marshal *Tallard*, as well

well as the Infantry, who were posted in the Villages, without the least Regard to their Preservation. The Enemy were not disposed to incommode Marshal *Marfin* and the Elector in their Retreat; for they were convinced, that the Destruction of Marshal *Tallard's* Army, would secure the Superiority of their Arms for the Remainder of the Campaign.

I have already observed, that there were 27 Battalions of the King's best Infantry, and twelve Squadrons of Dragoons, shut up in the Village of *Bleinheim*; but it would have been superfluous in them, to have made a long Resistance, in order to awaken Marshal *Marfin* from his Lethargy, and inspire him with the Thought of halting a League from the Field of Battle, to gather up the shatter'd Remains of Marshal *Tallard's* Army, and return to charge the Enemy who were then in disorder, and employed in the Pillage of the Camp. - The Enemy's Generals, therefore, summoned our General Officers, who were shut up in the Village, to lay down their Arms, and offered to receive them as Prisoners of War. These Conditions were accepted, and the Enemy made themselves Masters of an entire Army, without a Moment's Engagement. This was so dishonourable a Conduct, that it merited the utmost Severity, instead of those Rewards and Promotions

motions to Dignity that were lavished on the principal Authors of this pusillanimous Action.

Such was the Battle of *Hochstet*, the Misconduct of which should not be imputed to the Troops, who behaved with distinguished Bravery, but to the two Marshals, who made such an ignorant Disposition for the Engagement, and to the General Officers of the Right Wing, who never had the Consideration to retrieve the first Instances of ill Success, after Marshal *Tallard* was taken Prisoner, nor even to withdraw the Infantry from the Villages.

After the plain Relation I have given of this Battle, which may be justly considered as the Period that closed the Prosperity of the King's Reign; I shall enlarge my Observations on this unfortunate Event, and endeavour to make it evident, that the Fatality which attended it, was chiefly owing to the Inattention of our Generals to those Maxims of War which ought to guide them when they consider whether they have sufficient Reasons either to give or receive Battle, or whether they can derive, from their particular Disposition of their Troops, any reasonable Hopes of defeating the Enemy.

In order, therefore, to examine the Subject in the Method I intended to pursue, I shall first point out the Errors that were committed, with Reference to the general
State

State of the War in *Germany*, previous to the Battle of *Hochstet*, and shall conclude with remarking the Errors that appeared in the particular Disposition of our Army; by which means I hope to make it evident, that particular Instances of Misconduct always result from those that are general.

It was absolutely improper, at that time, to trust the Decision of the War in *Germany*, to the Event of a single Battle; and this Truth was the less doubtful, because we were sensible that the *English* and *Dutch* had almost abandoned the War in *Flanders*, in this Campaign, to make a decisive Effort in *Germany*, without which the Emperor could no longer have supported himself, nor could they have drawn any Supplies of Men from *Germany*. We ought therefore, to have avoided this Battle, since we could have maintained our Situation, had we only compelled the *English* and *Dutch* either to withdraw from that Country, or entirely to discontinue the War in *Flanders*.

This general Proposition will be established, if we only consider the particular Situation of Affairs.

The Elector of *Bavaria*, who espoused the Interest of the two Crowns, was Master of the whole Course of the *Danube*, almost from its Source, to the Frontiers of *Austria*, into which he could penetrate when he pleased.

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Consequently the Emperor, whose Attention was then employed by the Malecontents in *Hungary*, was likewise obliged to have a watchful Eye on *Austria* and *Tirol*, as well for the Preservation of those Provinces, as the Security of a free Communication with his Army in *Italy*.

The Bridges which the Elector of *Bavaria* had on the *Danube*, opened to him a free Communication with the Upper *Palatinate*; the Emperor must, consequently, be always apprehensive that this Prince would pour a Body of Troops into *Bohemia*, where the People were exceedingly exasperated at the Severity of the Imperial Government, and where their Fears were the only Motives to their Submission: Which made it likewise necessary for the Emperor to maintain a Body of Troops, to cover *Bohemia* and *Moravia*. *Nurenburg*, an Imperial City, and almost seated in the Heart of the Empire, is the most considerable City in all the Circle of *Franconia*; it was incumbent, therefore, on the Emperor, to preserve it in the Interest of the League, lest the Elector of *Bavaria* should make himself Master of it, as he had already seized *Ulm* and *Ausburg*. *Nurenburg*, therefore, could be only preserved by the Protection of the Confederate Army, which consequently could not withdraw to any great Distance from that City, whose Preservation

vation was of the more Importance to the Emperor, since the Loss of it would deprive him of all Communication with his Dominions on the *Rhine*, except through the Country on the other Side of the *Mein*, which the Situation of *Nurenburg* would have rendered altogether impracticable. It is likewise evident, that the Confederate Army could not retreat to any considerable Distance from a City, where all their Ammunition and Provisions were deposited.

Some Days before the Battle of *Hochstet*, the Allies had forced the intrenched Camp at *Schellenberg*, and taken *Donawert*. By this Conquest they were accommodated with a Bridge over the *Danube*, and had separated our fortified Places on the Upper *Danube*, from those on the Lower. But as their Provisions were still lodged either in *Nurenburg* or *Norlingen*, they durst not venture to quit *Franconia* and *Suabia*, to advance into *Bavaria*.

This obvious Reflection was alone sufficient to convince our Generals, that their Inducements to engage the Enemy, could not possibly have any Weight, but that it was rather their Interest to decline a general Action, and especially as this cautious Conduct would infallibly have obliged the Enemy to abandon the Parts adjacent to the *Danube*,

nube, when they had consumed all the Forrage near that River.

Marshal *Villeroi* was posted with a considerable Army before the Lines of *Biel*, which Prince *Eugene* had quitted with the greatest part of his regular Troops, and unperceived by that General. The Conjunction of this Prince with the Duke of *Marlborough*, was generally known, and Marshal *Villeroi* might have waked from his Inactivity, and forced the Lines which were only guarded by an inconsiderable Body of Militia; and might afterwards have advanced with his Army, through the Duchy of *Wurtemberg*, to the *Necker*, which would have rendered the Enemy incapable of preserving their Communication with the Lower *Necker*, for the Security of their Provisions, which were conveyed to *Norlingen* from the *Rhine* and the *Mein*. And thus would this single Motion have limited the Supply of the Enemy's Provisions to *Nurenburg*, and consequently they could never think it safe to be very remote from that City.

Marshal *Villeroi* might even have compelled the Enemy to retire, in part to the *Rhine*, and leave the Elector of *Bavaria* to act with Freedom in the Heart of *Germany*, had that General forced the Lines of *Biel*, and then marched his Army down the *Rhine*, near *Philipsburg*: For this Motion alone would have

have obliged the Enemy to separate, in order to protect *Philipsburg*, and the Lower *Necker*. This March might likewise have been effected without the least Danger, because when the Lines had once been forced, Marshal *Villeroi* might have thrown a Bridge over the *Rhine*, in case the Enemy had approached him with all their Forces, and if they had attempted that Motion, they would have abandoned *Austria*, and even the City of *Vienna* to the Elector of *Bavaria*.

From this general State of the War in *Germany*, in the Year 1704, it is easy to observe, that we had no Reason to engage an Enemy, who could not long have continued near the *Danube*, and who, when they had retreated from the River, would have been in no Condition to post themselves in any Situation between the *Mein* and the *Danube*, to protect *Austria* on the other Side of the *Danube*, and the *Necker* at the same time.

These are the Errors we committed, with respect to the general State of the War in *Germany*; the rest relate to the particular Disposition and Order of Battle; and these I shall enumerate in the following manner.

1st, We encamped our two Armies as if they were to engage separately.

2^{dly}, We disposed them, on the Day of Battle, in the order of their Encampment, and only on the Front of the Camp.

3dly, We did not chuse our Field of Battle so near the Rivulet, as would have prevented the Enemy from passing it, and not have left them a sufficient Extent of Ground, to form their Troops between the Rivulet and the Front of our Line.

4thly, We neglected to advance our Right and Center upon the Enemy, when we saw they had passed the Rivulet, and form'd themselves on our Front.

5thly, We had not the Precaution to take a strict View of the Rivulet, when we arrived at our Camp; and were so inconsiderate as not to post a Body of Infantry along the Bank, for the Security of our Camp, and to gain Intelligence of the Enemy's Motions.

6thly, We were so injudicious, as to form our Center of Battle out of the Right and Left Wings of our two Armies, instead of providing a formidable Center of Infantry.

7thly, We shut up the greatest and best part of Marshal *Tallard's* Infantry in the Village of *Bleinheim*, where they were posted without the least Order, and rendered incapable of forming any Motion; and we had not even the Precaution to secure a Communication, from one Brigade, or Regiment, to another.

8thly, We did not survey the Ground that extended from our Right, to the Rivulet and the *Danube*, and we posted Dragoons there instead of Infantry.

9thly,

9thly, When we arrived at our Camp, we neglected to detach a Body of Cavalry beyond the Left of our two Armies, to observe the Situation of the Enemy's Camp, which we were unacquainted with to such a Degree, as not to know that Prince *Eugene* had joined the Duke of *Marlborough*, with his Army, and we imagined the Prince of *Baden* was engaged with a considerable Body of Troops, at the Siege of *Ingolstadt*.

10. After the first Disorder in our grand Center of Cavalry, and after they had shrunk from their Ground, till they form'd a confused Line with the Infantry who were embarrassed in the Village of *Bleinheim*, the Elector's Army did not close on their Right, to form an Attack in Flank upon the Enemy, who had advanced beyond the Interval of Ground that extended between the two Villages. Had they disposed themselves into this Motion, they might either have sustained, or drawn off our Infantry from *Bleinheim*, and have given our Cavalry, who had been disordered by the Fire of the Enemy's Foot, an Opportunity of rallying in Order of Battle. But instead of this obvious Motion, that whole Army were only attentive on their Retreat to *Ulm*; and they abandoned Marshal *Tallard's* Infantry, while the Cavalry of that General's Army never attempted to recover their proper Order, or make any Effort to

disengage their Infantry, when they saw the Elector's Army retreat from the Field of Battle.

11. When Marshal *Tallard* was taken Prisoner, and our Center entirely thrown into Disorder, not one of the General Officers of the Marshal's Army, made the least Endeavour to draw the Infantry from *Bleinheim*, while they had an Opportunity of affording them that Relief, by marching them along the *Danube*, till they had rejoined their Cavalry: But, on the Contrary, those who were charged, in particular, with the Command of this Body of Infantry, either entirely abandoned them, even before they were attacked, when they saw the Cavalry defeated, and plunging themselves into the *Danube*, in hopes of swimming to the other Side; or else they continued in the Village, without daring to leave it, and were even so destitute of Thought, as not to attempt any Communication between the Battalions; in a word, they seemed to continue there, with no other View, than to charge themselves with the despicable Province of making a brave Set of Battalions lay down their Arms with Reluctance, and of surrendring to the Enemy, twenty seven Battalions and twelve Squadrons of his Majesty's best Troops: Which was so infamous an Action, that I am persuaded it will hardly be credited by
Poste.

Posterity; especially when they shall be informed, that except one Brigadier of Foot, who was broke, all the other Authors or Spectators of this contemptible Timidity, were rewarded, and advanced to Stations of Dignity.

The Encounter at *Eckeren* in *Flanders*, in the Year 1705, belongs to the second Species of great Actions. I shall be very succinct in relating the Particulars, because the Consequences of that Event were of little Importance, and my Knowledge of the Circumstances is but imperfect. I only know, that we had it in our Power to destroy a considerable Body of the Enemy's Infantry, had ours, who advanced on a Dike to post themselves before the Enemy in their Retreat, been led with more Vigour, by the General Officer who commanded them; and who was censured for halting, when he found himself exposed to a very moderate Fire of a small Body of Infantry, stationed on that Dike, to support the rest of their Party, in their Arrival and Retreat. As our Forces, therefore, were not form'd into any Disposition to attack this Body of the Enemy, who could only be destroyed by our intercepting them in their Retreat, it will be sufficient for me to observe, that a General should never intrust a bold Expedition to the Conduct of an indolent and pusillanimous Officer.

The Encounter at
Eckeren,
1705.

The En-
counter at
Calcinato,
1706.

The Encounter at *Calcinato*, in the Year 1706, when our Troops were commanded by the Duke of *Vendôme*, was rather a Surprisal of an Army's Winter Quarters, than any general Engagement in either Class of great Actions, which are the Subject of this Chapter.

At the Close of the preceding Campaign, Prince *Eugene* thought he might safely quarter his Army at the Foot of the *Alps*, between the Lakes of *Guardia* and *Isco*. His head Quarters had *Calcinato* in the Center, *Carpendolo* to the Right, and *Montechiaro* to the Left. This Prince had consigned the General Command of these head Quarters to Count *Rewentlaw*, after which he set out for *Vienna*.

When the Duke of *Vendôme* beheld this Disposition, he determined to force the Quarters; but as his Army was greatly fatigued and impaired, he contented himself, at that time, with disposing his Quarters in such a manner, as enabled him to reassemble his Troops on any sudden Occasion, and particularly, upon the Arrival of those Recruits he expected from *France*. He imparted his Design to Count *Medavi*, to whom he left the Command of the Quarters on the *Oglio*, and *Adda*, after which, this Prince went to *Paris*, without giving the Enemy any Cause

to suspect the intended Project. The Duke upon his Return from *France*, which happened a few Days before that of Prince *Eugene* from *Vienna*, found Count *Rewentlaw* very quiet in his Quarters; while Count *Medavi*, in order to execute the Duke's Orders, had made the necessary Dispositions for a secret and expeditious March of three hundred Foot, and about five hundred Horse, who arrived the same Night at *Castiglione*, seated in a Plain opposite to the Enemy's three Quarters, and a League in Distance.

Our Forces were drawn up in Order of Battle, at Break of Day, in the Plain before the Enemy's Quarters; but the length of Time we were obliged to take in our March, and the Difficulties that occurred to us in ascending the rising Ground, gave the Enemy an Opportunity of forming themselves on an Eminence that extended along their Quarters of *Carpendolo* and *Calcinato*.

In this Disposition, Count *Rewentlaw* sustained our first Charges for some time, and with considerable Advantage against the Cavalry of our Left; but observing that our Right had penetrated between the Troops of *Montechiaro* Quarter, and his Left, and that he could be no longer joined by that Quarter, and that our Troops were even preparing to cut off their Retreat to *Salo*, he
imme-

immediately thought it time to retire; but could not accomplish that Motion, without creating so general a Disorder, that neither the broken Remains of the Forces who had engaged, nor even the Quarter of *Montechi-aro*, who had no Share in the Action, durst venture to halt at *Salo*, but passed on to *Roveredo*, and the opening into *Tirol*, where their Front, in the Confusion of their Flight, met Prince *Eugene* in his return from *Vienna*.

It were to be wished, for the Welfare of the King's Affairs, that the Duke of *Vendôme* had, on this Occasion, been more vigorous in his Pursuit of the Enemy, who were entirely disordered, and that he had marched his own Forces to *Roveredo*, at the Pass of the *Alps*, which he might have done without any Opposition. This Motion would have reinstated the War of *Italy* in its first Situation; because we should then have divested the Enemy of all their Posts on this Side of the *Alps*. But the Duke of *Vendôme* thought it more material to advance to the other Quarters, which the Enemy possessed between the *Adige* and the *Po*; but they had the good Fortune to remove them before our Arrival, and Prince *Eugene* sent back to *Salo*, the first Troops he could draw together; he afterwards assembled the rest at *Roveredo*, and found means to re-establish his Army, by speedy Reinforcements from *Germany*, and then

then opened the Campaign with a fine Army, tho' something later than he at first intended.

This Example justifies the Maxim necessary to be observed, in the Execution of a Project for surprising particular Quarters, or the separate Winter Quarters of a whole Army; and makes it evident, that the meer Surprisal of those Quarters is not sufficient, but that when the Disorder becomes general, it is absolutely necessary to pursue the defeated Troops, till they are entirely destroyed or dispersed; because the Loss of all their Military Equipage, is the infallible Effect of their Dispersion; and it will be a considerable time before the Army can make another Appearance in that Campaign; especially when an Action of this calamitous Nature, happens towards the Close of a Season for the Winter Quarters, or at the opening of the Campaign: And this Circumstance would have been effectually compleated, in the Action of *Calcinato*, had it been pursued with more Vivacity.

The Encounter at *Cassano* in 1706, has been called a Battle; The Battle of *Cassano*, 1706. tho' it was only a great Engagement of Foot; for the Armies did not charge in their entire Fronts, and the Enemy only attacked our Center.

Prince

Prince *Eugene* was posted with the Emperor's Army, on the other Side of the *Adda*, in a seeming Disposition to pass that River; on the opposite Side of which the Duke of *Vendôme* had drawn up the King's Forces, to prevent the Enemy from accomplishing that Motion. When the two Armies had continued some Days, in their opposite Situations, Prince *Eugene*, after he had made a Feint to throw Bridges over the *Adda*, from that Quarter which fronted *Paradis*, marched his Army down that River, as if he intended to pass it at *Picighitone*. The Duke of *Vendôme* followed him, and the two Armies were only separated by the River: But as the Disposition of the Country on the other Side, enabled Prince *Eugene* to conceal his Motions from the Duke of *Vendôme*, tho' he marched very near the River; the Duke stretched out his Lines a little too far, in order to possess a larger Extent of Ground along the River, with a Persuasion that, where-ever the Enemy might attempt a Passage, he should still be in a Condition to draw his Forces together, and oppose them with a stronger Body than any that could have passed the River.

This Thought would certainly have been judicious, had the whole Extent of the Bank afforded him a free Communication, without making it necessary for him to defile his Troops over Bridges; but it happened to be
other-

otherwise. The *Adda*, like all other Rivers in that Country, supplies the Lands with Water; there is likewise a Canal which opens near *Paradis*, and rejoins the *Adda* a little above the Bridge of *Cassano*; and at a small Distance below that Bridge, another Canal is struck out, which winds round *Odi*, and returns to that River between *Odi* and *Picighitone*.

It appears, from this particular Description, that our Forces, whom the Duke of *Vendôme* would willingly have marched near the River, were extended and separated into three Bodies. His Rear Guard was on the other Side of the Canal that runs from *Paradis*, to the Bridge of *Cassano*; while his Center was opposite to that Bridge, and his Van-Guard was above two Leagues from him, on the other Side of the Canal that encircles *Odi*.

This was the favourable Moment which Prince *Eugene* resolved to improve, by attacking our Center. This Prince, whose Motions, as I have already intimated, were concealed from our View, was then with all his Army very near *Cassano*, and made a sudden Attack on the Bridge, near which our Battalions were then defiling. And as they were assaulted in Flank, they were immediately thrown into great Disorder. The Front of the Enemy's Infantry, who appeared

at the same time, on the Bank of the River, repulsed our Column of Infantry, who were then upon their March, and little expected an Engagement; and they continued their disorderly Retreat to the Bank of the Canal, and then made a brave Advance to the Enemy's Battalions, who had pass'd through the River up to their Waists; and fell upon them with so much Resolution, that they either killed or drowned all those who had past the River.

Those of the Enemy who had marched over the Bridge, endeavoured to extend themselves, but were charged in Front by the Infantry they had lately defeated, and who had recovered their Order, under the Castle of *Cassano*. The Right of our Center of Infantry, who had no longer any Enemies to engage on this Side of the River, attacked the Flank of the Enemy's Infantry, who had passed the River; and such was the good Fortune of the Duke of *Vendôme*, that his Rear Guard, whom he then believed to be very remote, arrived at that Instant, and joined in our Attack of the Enemy who had already past the River, so that all those who had crost it below the Bridge, were entirely destroyed, and Prince *Eugene* was obliged to retire out of the View of our Army, and to leave us Masters of the Field of Battle, after he had lost a considerable part of his Infantry.

Our

HISTORICAL *and* MILITARY. 159

Our Van-Guard had not any Share in this Action, and declared they did not even hear the Cannon and small Shot, tho' they were then upon the Halt.

Both the Generals, tho' they were Persons of distinguished Merit and Abilities, committed several Errors in this Action.

Prince *Eugene's* Project was very masterly; he had sustained a War in *Italy* for several Years, with an Army much inferior in Number to that of the confederate Crowns, and without any fix'd Establishments; and yet he was always solicitous to begin the Attack. This he accordingly did, but never in such a manner as to hazard any Action that could possibly be decisive against him, tho' it would have proved fatal to us, had his first Efforts been attended with Success. This is no common Talent in a General, and discovers a constant Train of judicious Attentions to secure a fortunate Event, without hazarding a general Decision on his Part: This Conduct was very conspicuous in the Action of *Cassano*; and the Prince would have effectually separated the Army of the two Crowns, after he had defeated one Part, if some Circumstances had not precipitated the Action too suddenly. For it is evident, that Prince *Eugene* had it in his Power not to engage, till the Center of our Army had advanced to the other Side of the Bridge of
Cassano,

Cassano, and till the Column of our Infantry had continued their March till they were out of Sight, and at a sufficient Distance from the Bridge: He might have past all his Army over the Bridge, without Opposition; and entirely have destroyed the Rear Guard, who followed the Center at a remote Distance; after which he might have separated the rest of our Army from *Milan*, where, at that time, he might possibly have effected a Revolution, because all the *Milaneze* was destitute of Troops.

I may therefore affirm, that this noble Project, which was concerted with so much Judgment, and even conducted to the very Point of Execution; was ineffectual for no other Reason, than its beginning to operate too soon. And in Justice to Prince *Eugene*, I am inclined to think, that some unforeseen Circumstances obliged him to begin the Action a little too early, and I derive this Supposition, from his extraordinary Efforts to separate our Army.

The Duke of *Vendôme* may be likewise charged with some Misconduct on this Occasion. This General had, for some time, prevented Prince *Eugene* from passing the Upper *Adda*. He saw the Enemy draw themselves into a large Extent, and was persuaded that he ought to continue near that River, lest the Enemy should cross it where
it

It was fordable; before he could be in a Condition to oppose them, and even before the *Venetians* had allowed the Emperor's Army a free Passage; and should then advance to *Odi* and *Picighitone* before him. These Apprehensions were certainly just, but in my Judgment, this Inconvenience might have been remedied, had the Duke of *Vendôme* not separated his Troops so much as he did.

The Castle of *Cassano* had but a weak Garrison to secure the Stone Bridge over the *Adda*; we, therefore, should have either destroyed that Bridge, or, at least, have protected it from any Insult, by throwing up some strong Work: But since this Precaution had not been taken before, we ought, at least, while the Army was passing before this Bridge, to have posted a Body of Foot there to defend it, since the Enemy, who were likewise upon their March, might be much nearer than we imagined.

Our Forces ought not to have marched even between the *Adda*, and the Canals; because they were separated by that Disposition. For of what Advantage would it have been to the Enemy, had they pass'd the *Adda*, to the Land between that River and the Canals, if they still would have had a Canal to cross, before they could advance to our Army, which might then have been advantageously posted on the little Eminencies above the Canals?

nals? And besides, these Canals are more difficult to be passed, than the Rivers out of which they rise. But if the Duke of *Vendome* extended his Troops into such a Length, only to prevent the Enemy from entering the Bason of *Odi*, between the *Adda* and the Canal, before him; his first Consideration should have been to make himself effectually Master of the Bridge of *Cassano*, e'er he defiled the Army before it, without any Knowledge of the Enemy's Motions, or at what Distance they might then be from the Bridge; since the Disposition of the Country enabled them to conceal their March, and every other Motion they formed.

The Battle of *Ramillies* (a) which was lost by the Marshal *de Villeroi*, is, with Respect to the general Disposition of the two Armies, of the first Class of great Actions; since it is

(a) *RAMILLIES*, is a Village, surrounded with a Ditch, in *Brabant*, in the District of *Louvain*, by the Skirts of the Province of *Namur*; and render'd famous to all Posterity by the glorious Victory obtained there, by the Duke of *Marlbrough*, and Monsieur *d'Auverquerque*, over the Elector of *Bavaria*, and Marshal *Villeroi*, which was followed by the Reduction of almost all the *Netherlands* in two Months time. It lies at the Head of the *Geet*, about a Mile and a half North from the Side of the *Mehaigne*, that Interval being the narrow Aperture where that glorious Battle was fought. It is six Miles, almost South, from *Judoigne*, twelve Miles South from *Tirlemont*, fourteen Miles West-North-West from *Huy*, and eleven Miles North from *Namur*.

certain,

certain, that both Armies confronted each other in Order of Battle : But with Reference to the particular Disposition of the Action, it is only to be considered as an Encounter against the Right of our Cavalry, and the Right of our Infantry.

This Battle was so fatal to the two Crowns, and produced such extraordinary Events; that for the better Comprehension of the Particulars I am now to describe, it will be necessary for me to give a previous Account of the general State of the War; in order to make it evident, that we resolved upon this decisive Action, without any of those Inducements, by which, as I have observed in my Maxims, a General ought to be conducted when he determines to engage his Enemy. After which, I shall point out the Errors that appeared, as well in the general, as in the particular Disposition of our Troops; and likewise those that were committed after this Battle, and which fully compleated our Calamities.

I have intimated in my Maxims, with Relation to Battles, that a General should never be disposed either to offer or receive Battle, except in those Conjunctures, wherein the Benefits that will redound to his Prince, from a prosperous Event, will be much greater than any Disadvantages he can possibly sustain by a Defeat. This first Maxim, so in-

contestible in its own Nature, and so necessary to be observed, was entirely disregarded, on this Occasion, by Marshal *Villeroi*.

Notwithstanding the fatal Event of the Battle of *Hochstet*, the War that rekindled on the *Rhine*, was sustained with Equality. It was carried on to Advantage, in *Italy*, where the Duke of *Vendôme*, who opposed Prince *Eugene*, gave Monsieur *de la Feuillade* an Opportunity to form the Siege of *Turin*. The Duke of *Berwick* sustained a very difficult War in *Spain*, after Marshal *de Tessé* had quitted the Siege of *Barcelona*, in so pusillanimous a manner. The confederate Crowns, therefore, should have only maintained a defensive War, in *Flanders*, during this Campaign; and for which we were effectually prepared, by forming a new Line along the *Dile*.

Our Resolution, therefore, to open the Campaign with a general Action, the Success of which would have been but inconsiderable on our Part, in that early Season, was a remarkable Error, in that general State of Affairs; and resulted from a presumptive Vanity, and a perfect Inattention to the general Plan of the War.

Marshal *Villeroi* was determined, without the least Reason, to open the Campaign out of his Lines. With this View, he marched to *Tillemont*, but he should have thought this Motion

Motion sufficient, and he might possibly have had just Inducements to make it. An Army that is only charged with a defensive War in its Lines, ought to be assembled sooner than the Enemy, in order to gain some Days, at least, for the Consumption of the Forrage near the Lines; and had we pursued this cautious Conduct, it would have been difficult for the Enemy to approach our Lines; and their Continuance in the adjacent Country, would have been destructive to their Cavalry and Equipage.

If Marshal *Villeroi* had been content with his Advance to *Tillemont*, and had caused his Army to consume the Forrage between his Camp and the *Dile*, he might have effected the Preservation of the *Netherlands*, and the Security of his Lines, without hazarding any Engagement. But he thought this first March insufficient, tho' it might have produced a very judicious Effect; and instead of waiting for the Elector of *Bavaria*, with whom, in meer Deference to his Rank, he ought, at least, to have acted in Concert; he decamped from *Tillemont*, and advanced to *Ramillies*, without acquiring any Intelligence of the Motions form'd by the Enemy, who were then assembled near *Tongres*.

When the Van of his March began to appear at the Head of the little *Geet*, where *Ramillies* is seated; he was informed, that

the Enemy were advancing to him, and that their Front already began to be discovered. He then prepared to form his Troops in Order of Battle, with a full Persuasion that the Enemy would not presume to attack so formidable an Army as his own. Had his Disposition been regular, the Bravery of his Troops might have rendered the Action successful; but it was so extremely injudicious, and ill precautioned against the Order in which he saw the Enemy ranged; that it can hardly be thought surprising, that the Event of this Battle was so fatal as it really proved.

I shall now represent the Errors committed by Marshal *Villeroi*, with respect to his particular Disposition; which I shall describe from the Left of the Army, and through the Extent of the Line, to the Extremity of the Right. I shall then proceed to the second Line, and from thence to the Rear, to make it evident, that the Disposition was every where irregular, and contrary to all just Rules.

The left Wing of the Cavalry was covered by the *Geet*, and the Marshes that bounded it, and where the Troops could neither charge the Enemy, nor be charged by them; and consequently they continued useless during the Engagement. The Village of *Ramillies*, which was seated in a Plain, beyond the

HISTORICAL *and* MILITARY. 167

the Source of the *Geet*, fronted the Right of the Infantry; and Marshal *Villeroi* had posted some Battalions there, but the Village was too distant from our Line, to be supported to any Effect, when it should happen to be attacked by the Enemy. We even neglected to open the Hedges towards the Line, in order to advance with a more extended Front, in case it should be necessary to support the Infantry in the Village, who had not the Precaution to accommodate that Place, either to their Front or Flanks, nor even to form a Communication between their several Battalions; so that they were only posted in the Enclosures and Gardens. But the most extraordinary Circumstance of all was, that in order to defend the Village, which it was imagined, would cost the Enemy very dear to surprise; tho' it was too remote from the Line to produce any such Effect, we posted there all the useless Infantry of the Army, composed, for the greatest part, of foreign Battalions and Recruits, and even Prisoners taken from the Enemy. When the Village, therefore, was attacked, the Assailants only engaged a Sett of inconsiderable Troops, who were ill disposed, and not supported either in time, or from any Situation near enough to have any Effect, and the Village was forced by an Attack upon the Flanks, which were entirely unprotected.

The Disposition of our Right was still worse than that of our Left of the Center. The Village of *Taniers* on the Bank of the *Mebaign*, ought to have supported our Right, and deserved a considerable Body of Infantry to guard it; but Marshal *Villeroi* contented himself, at first, with detaching a Regiment of Dragoons thither, who were very severely treated by the Enemy's Infantry; and he afterwards supplied it with a Brigade and four Battalions, who were overwhelmed by the superior Fire of the Enemy's Infantry, who were already Masters of the Village.

I shall add, to all this inconsiderate Disposition of the Front, a particular Neglect which likewise contributed to the Loss of the Battle. I have already observed that Marshal *Villeroi* received Intelligence, in the Morning, that the Enemy were advancing toward him; and yet in all the Course of Time he then had to disengage his Troops from the Impediments of their Baggage, he never thought of that Precaution; so that the greatest Part of it was heaped up between the two Lines, and embarrassed their Motions, especially to the Right where the Action was sustained.

Such were the principal Defects in our Disposition, and they were all so very considerable and essential, that one alone would have been sufficient to have lost us the Battle.

The

HISTORICAL *and* MILITARY. 169

The Enemy who were sensible of our injudicious Arrangement, were above five hours in changing their Order of Battle, in order to form another that might be more advantageous to them, in that Conjunction. In all that length of time, our Troops continued under Arms, without forming any Motion; and whatever Instances could possibly be made to Marshal *Villeroi*, to adjust his Order of Battle by that which he saw the Enemy forming, in order to attack us, it was impossible to prevail upon him to vary his first Disposition.

Our whole Army beheld the Enemy unguarding their Right, because it would have been in vain for them to have attacked our Left, which was covered by the *Geet*. The Lieutenant General, who commanded on the Left, sent frequent Intelligence to Marshal *Villeroi* of the Enemy's Motions, which he had observed, and proposed to him, not to leave any more Cavalry on the Left, than would be proportionable to what the Enemy reserved at their Right, and to double the rest behind the Left; but Monsieur de *Gassion* recommended this salutary and judicious Advice in vain. It was likewise observed, that the Enemy still drew off part of their Infantry from the Right, and formed several Lines before the Village of *Ramillies*, and the Right of our Infantry; and we might naturally

naturally imagine they intended to make a powerful Effort against that Village, and the Right of our Infantry. But whatever Remonstrances could be made to Marshal *Villeroi*, to induce him to approach the Village, and double part of the Infantry of the Left, behind that of the Right and Center, as he saw performed by the Enemy, he continued inflexible, tho' he had all imaginable Reason to conform the Disposition for his Defence to the Enemy's Preparations for attacking him.

It was likewise observed, that the Enemy drew off a Body of Infantry from their second Line, and marched them to *Taniers*; and it was represented, tho' ineffectually, to Marshal *Villeroi*, that the Enemy poured all their Force to their Left, and that it would be impossible for our Right to sustain so formidable an Effort; but no Consideration could induce him to act consistently with the Enemy. In fine, when above five Hours had been employed by the Enemy in forming the Disposition I have described; while Marshal *Villeroi*, in all that Length of Time, never made the least Provision for enabling the Right to support the Shock with which they were threatned, the Enemy attacked the Village of *Taniers*; and when they had entirely carried it, and improved it to support their Left, they advanced in four Lines,

to our Right Wing of Cavalry, and in several Lines and Columns' to our Infantry, who were posted in the Village of *Ramillies*. As they approached our Right, they advanced their second and fourth Lines into the Intervals of their first and second Line, so that when they made their Advance upon us, they formed only one Front, without any intermediate Spaces.

This Motion was performed so near us, that our Right had no time either to close themselves, in order to fill their Intervals, by that Contraction, or to supply them with the second Line, which, besides their immoderate Distance from the first Line, were incapable of making that Advance with Freedom, on account of the several Equipages, which, as I have already intimated, were left, through meer Negligence, between the two Lines.

Our Right therefore, was charged by one contiguous Front, whose Squadrons that forced our Intervals, penetrated without Opposition, and then wheeled about to charge the Squadrons of our first Line, in the Rear, who, tho' they had almost defeated all the Squadrons that attacked them, were now thrown into a general Disorder by the Squadrons of the Enemy's second Line, and by those who charged them in the Rear.

The Enemy conducted the Attack of the Village of *Ramillies*, differently from that of the Cavalry on the Right. They advanced to it in four Columns; but when they approached the Front of that Village, they were convinced that our Line of Foot was too remote to protect it with their Fire; and that the Flanks of the Village was not guarded by Troops, because their Number in that Place was too inconsiderable. From this bad Disposition on our Part, they derived one that was advantageous to themselves; for they advanced one of their last Lines into the Front of the first; and when they were marching up to the Village, this Front extended in an Angle to the Flank of that Village, and easily forced it, while the other Troops sustained the Attack from the Front of that Place.

All this Disorder of our Right was not to be retrieved, either by the Presence of the General himself, or the several General Officers in that Quarter. The Bravery both of Officers and Soldiers was incapable of reinstating an Action that was lost by a bad Disposition; so that a general Confusion was communicated through all our Right, who abandoned the Field of Battle and their Cannon. The Left of the Cavalry, and some Battalions of the Left, who had not shared the Engagement, retired without any Molestation, till
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HISTORICAL and MILITARY. 173

the Approach of Night, when the Flight and Disorder became universal.

Thus did the Enemy, in the space of one Quarter of an Hour, defeat an Army of Eighty thousand Men, while their own Loss did not amount to two thousand. They took 80 Pieces of Cannon; a prodigious Quantity of Baggage, and conquered all the *Spanish Netherlands*, which our General had abandoned. I shall only observe from this fatal Battle, that it seems to me perfectly surprising, that it should be so long before the King of *France* discovered what was always so well known to the whole Kingdom.

The Battle of *Castiglione*, in which Count *Medavi* defeated the *Landgrave* of *Hesse*, in the Year 1706, and two Days after the Siege of *Turin* was raised, belongs to the first Species of great Actions; since the two Armies charged through their whole Fronts, tho' they did not enter upon the Engagement, at the same time, in their compleat Extent.

The Battle
of *Castiglione*,
1706.

When the Duke of *Orleans* quitted the lower *Po*, to follow Prince *Eugene*, who marched to the Relief of *Turin*, he left Count *Medavi* on the *Mincio*, to observe the Motion of a Body of Troops which Prince *Eugene* had committed to the *Landgrave* of *Hesse*; who finding himself superior to the Count by three or four thousand Men, thought he

might

might venture to undertake some Expedition in that General's View.

With this Intention, he passed the Upper *Mincio*, and besieged the Castle of *Castiglione del Stivere*. Count *Medavi*, to whom it was of great Importance to preserve that Fortrefs, because its Loss would have facilitated the Advance of the *Landgrave's* Troops to *Bergamo* and *Brescia*, was determined to come to an Engagement, in order to relieve *Castiglione*.

To render the Disposition made by Count *Medavi*, for this Battle, the more intelligible, it will be necessary for me to describe the Form of the Country. From *Goito* to *Medoli*, and the Tower of *Solferino*, a very smooth Plain is extended. *Castiglione* is seated among the little Hills that rise at the Foot of the *Alps*, and stretch to the *Mincio* near *Monzambano*.

It is evident, therefore, that the *Landgrave*, by continuing his Siege, might oblige Count *Medavi* to advance for the Relief of that Place, with his Troops divided into small Parties, and by defiling them among the Hills; and had this Prince been intent to secure that Advantage, it is certain that the Affair would have been very difficult to execute: But the Moment he had Intelligence, that Count *Medavi* was advancing to him, he descended into the Plain, without the least

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Hesitation, and ranged his Troops in Order of Battle. Count *Medavi* did the same, on his Part.

The Infantry of the Enemy's Left, easily broke in, at first, upon our Right, where Count *Medavi* had been obliged to dispose the *Spanish* Infantry. This Opening gave the Enemy's Cavalry to their Left, some little Success, and they gained Ground on the Cavalry to our Right: But the second Line having advanced in one entire Body, and Count *Medavi* having caused the Battalions of that Line to fill up the Disruption, which the Confusion of the *Spanish* Infantry had occasioned, the former Order was re-established; and with the greater Ease, because our Horse and Foot to the Left, pressing upon the Enemy's Right, and our Brigades of Foot to the Left, bearing upon the Enemy's Center, while our Horse drove those that were opposed to them; and having charged that Infantry in Flank, the Disorder became general, through the whole Front of the Enemy's first Line; and they quitted the Field of Battle, and their Cannon; whilst those who endeavoured to preserve themselves, fled in the utmost Confusion, and were only befriended by the Hills, which, by concealing them from our View, gave them an Opportunity of repassing the *Mincio*, near *Ponticastelli*.

176 MEMOIRS

If we had always fought as successfully as we did at *Castiglione*, the King of *Spain* might have still been Master of all *Italy*, and the Duke of *Savoy* would have been divested of all his Dominions.

The Battle of *Almanza* (a), gained by the Duke of *Berwick*, in the Spring of the Year 1707, was an Action of the first Species, since the two Armies charged through the whole Extent of their Fronts.

The Enemies were Masters of the two entire Kingdoms of *Valencia* and *Arragon*, and of all *Catalonia*; and were preparing to enter *New Castile*. A few Days before the Battle, they had received a powerful Reinforcement from *England* and *Holland*; and were determined to improve the Time of the first Campaign. With this Intent they past the *Xucar*, and advanced near *Almanza*. The Duke of *Berwick* marched up to them, without the least Hesitation, and the Armies engaged. The *Portuguese* Infantry being intirely broke in the first Charge, and our Cavalry having thrown that of the Enemy into Disorder, we remained absolute Masters of the field of Battle. The Duke of *Ber-*

(a) *Almanza*, a small Town in *North Castile*, about 60 Miles South-West of *Valencia*, and made remarkable for the Battle abovementioned, wherein the Allies received a fatal Defeat. Longitude 15, Latitude 39.

wick likewise pursued with his Cavalry thirteen of the Enemy's Battalions, who were retreating in good Order through the Mountains, with an Intention to repass the *Xucar*, and retire to *Valencia*; but as the Body of Infantry was extremely fatigued, and destitute of Bread, they were obliged to halt before they could arrive at the *Xucar*: This Discontinuance of their March gave our Infantry Time to approach them, and they were all made Prisoners of War. The Recovery of the Kingdoms of *Valencia* and *Arragon*, was owing to the Success of this Battle.

The Encounter at *Oudenard* (b) in 1708, belongs to the second Species of great Actions, because only one Van of our Army attacked a Front successively, which was stronger, and more extended than our own.

The Encounter at
Oudenard,
1708.

As I have in the Course of the preceding Chapters, related the Transactions previous to this Engagement, I shall only observe in this Place, that since we made no Disposi-

(b) *Oudenard*, is a rich and very strong Town of the *Low Countries*, in the Earldom of *Flanders*, the Marquisate of the Territories of *Oudenard*: it surrendered to the Duke of *Marlborough* in 1706. The *French* laid Siege to it the beginning of the Campaign in 1708, but the Approach of the Confederate Army made them abandon the Place, and engaged them in a Battle near it, which proved a fatal Overthrow to them. It stands on the River *Scheld*, 13 Miles South of *Ghent*; 13 North-west of *Aeth*; 36 West of *Brussels*, and 37 almost North of *Mons*. Longitude 22, 48. Lat. 50, 54.

tion for the Encounter, our Loss of Men, tho' very great, is not to be considered as a decisive Event; and indeed the Confusion, as well as our extraordinary Loss, happened in the Retreat we made in the Night, when the Troops were neither sensible where they fled, nor by whom they were conducted. In a Word, the Dispositions for this Engagement, and the Motives which induced us to undertake it, ought never to be repeated in any future Conjunction.

The Battle of *Malplaquet* was fought in the Year 1709. But this considerable Event, which comprehends the two Species of great Actions, ought to be deduced from Circumstances antecedent to the Action; because the previous Errors brought on this Event, in Opposition to the Rules I have drawn up for the Use of a General, who either intends to undertake an Action with his whole Army; or has sufficient Reason to decline it. For I find it impossible to determine, on this Occasion, whether Marshal *Villars* had any Inclination to bring on a general Action, or not.

Tho' I have elsewhere described the Disposition of the Enemy, during the Siege of *Tournay*, yet as that only related to the Siege, it will be proper for me to add, that the Enemy, besides all the Forces they had drawn together

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together to cover the Siege of *Tournay*, had likewise a Body of eight or ten thousand Men on the *Dender*, for the Security of their Convoys from *Brussels*, *Aeth* and *Oudenard*; because Marshal *Villars* had stationed the Chevalier de *Luxembourg* near *Condé*, with a Body of Horse and Foot, which made it absolutely necessary for the Enemy to post those Forces on the *Dender*. This Instance of their Conduct, only discovered a judicious Precaution for the Security of their Convoys, and Communications; and never created any Suspicion in Marshal *Villars* that they had the least Intention to besiege *Mons* (c).

There were two Circumstances in the Capitulation of the Citadel of *Tournay* (d), that were very remarkable, and sufficient to have made Marshal *Villars* sensible that the Ene-

(c) *Mons*, a very large, fine, strong, and rich City of the *Low Countries*, the Marquisate of the Earldom of *Hainault*, in the County of *Mons*, or proper *Hainault*. It stands on the River *Troville*, near the *Haisne*, 27 Miles South-West of *Brussels*, 33 North-East of *Cambray*, 37 West of *Namur*, 39 South of *Ghent*, 48 almost South of *Antwerp*, 120 North of *Paris*, and 128 almost South of *Amsterdam*. Longit. 23, 12. Lat. 50, 28. It was in the Neighbourhood of this Place, where the famous Victory of *Malplaquet* was gained by the Duke of *Marlborough*, &c.

(d) *Tournay*, a very strong City and Castle of the *Low Countries* in the Earldom of *Flanders*, in the Territory of *Tournay*, a Bishoprick under the Archbishop of *Cambray*. It stands on the River *Scheld*, 15 Miles East of *Lisle*, 20 North-East of *Doway*, 32 almost West of *Mons*, and 30 nigh South-East of *Ghent*. Longit. 22, 36. Lat. 50, 43.

my had entirely discontinued any Designs on the Side of *Bethune*, and the *Lys*, and that their next Expedition would be directed to the *Haisne*. These two Circumstances ought to be taken notice of here, in order to make it evident that Marshal *Villars* was defective in his Penetration, at this Conjunction; or, at least, that he wanted the Precaution to provide against the Inconveniencies of the Siege of *Mons*, without being obliged to come to an Engagement, should the Enemy persist in that Enterprize.

The Circumstances I would point at, were the two *Chamades* of the Citadel; the first of which was beat the 29th of *August*. Prince *Eugene*, who imagined that the Place was in a Condition to hold out a considerable time longer, was easily induced to believe that the *Chamade* was only beat, because the Garrison began to be destitute of Provisions, and therefore, thought he could oblige them to submit to very severe Articles of Capitulation: And the Moment the Hostages were exchanged, this Prince passed a Body of Horse and Foot consisting of ten or 12000 Men, over the *Scheld*, to possess our Lines on the *Troville* with all possible Expedition; and this Body was to be joined by that which, as I have already intimated, was posted on the *Dender*, for the Security of the Convoys: But as Monsieur *de Surville* refused to surren-

der the Citadel on the Conditions prescribed by Prince *Eugene*, the Capitulation broke off, and the Hostilities were renewed, and this Incident obliged Prince *Eugene* to cause the detached Body to halt at *Parvis*. The Motion of these two Bodies of Troops towards the *Haisne*, and their Halt, upon the Discontinuance of the Capitulation, should have inclined Marshal *Villars* to believe that the Enemy's Operations were no longer designed to be executed on the Side of the *Lys*; and in my Opinion it would have been prudent in him, to have caused all the Left of his Army, then posted towards the Bridge of *Avendin*, to approach him immediately. But he neglected this Precaution, and contented himself with detaching some more Battalions to the Chevalier *de Luxembourg*, with Orders for him to march to the Height of *Condé*, to observe that Body of the Enemy's Forces, which had halted at *Parvis*.

Two Days after this Event, the Citadel beginning to be more distressed for want of Provisions, beat a second *Chamade*; and Prince *Eugene*, who might reasonably suppose that Marshal *Villars* had penetrated into his Design upon *Mons*, became more condescending in the Articles of Capitulation, and they were immediately signed.

When this Affair was compleated, Prince *Eugene* having selected 36 Battalions, and a

Body of Horse, to protect his new Conquest for a few Days, while our Army continued near *Tournay*; dispatched Orders, with all Expedition, to the two advanced Bodies, to march through *Havre* to the *Haisne*, and possess our Lines on the *Troville*, before we could secure them for our selves. He then past the *Scheld*, between *Mortagne* and *Tournay*, with all his Forces, which he marched with the utmost Rapidity, that they might advance to the *Haisne*, before our whole Army could arrive there.

The Vivacity of this Motion, which could not be unknown to Marshal *Villars*, because he might have received perpetual Intelligence of it from *Valenciennes*, *Condé*, *St. Ghillian*, and even from *Mons*; obliged him to pass the *Scheld* with all the Right of his Army, and transfer his Left into the Camp of his Right. He even advanced, with all his Right, to *Quiévrain*, and detached Monsieur *de Legale* with another Body of Forces to support the Chevalier *de Luxembourg*. The Impossibility of supplying his Army with Bread from *Valenciennes*, and *Condé*, where there was not any Meal to be procured, retarded him for some Days; but in that Interval, the Left of his Army being no longer apprehensive of the Body of Troops posted at *Tournay*, marched and joined Marshal *Villars* at the Camp of *Quiévrain*, on this Side of
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HISTORICAL *and* MILITARY. 183

the *Honneau*. The Chevalier *de Luxembourg*, who had advanced to the Lines of the *Troville*, discovered on the Height of St. *Simphorien*, between the *Haisne* and the *Troville*, the two Bodies of the Enemy's Troops, who, as I have already observed, preceded the March of the Army. It is reported that he gave immediate Notice of this Discovery to Monsieur *de Legale*, who was then near the *Bosfu*, that he might advance in Order to support him; but this is certain, that Monsieur *de Legale* did not form any such March, and the Chevalier *de Luxembourg* thought it expedient to abandon the Lines of the *Troville*, and retreat to Monsieur *de Legale* and our Army; in Consequence of which Motion, this advanced Body of the Enemy's Forces, who began to be joined by the Front of the Army, past the *Troville*, and formed their Camp at *Sipply*.

All these Motions continued to the 7th of *September*, on which Day Marshal *Villars*, who had past the *Honneau*, at *Quievrin*, was joined by the Left of his Army, under the Conduct of Monsieur *d'Artagnan*. The 8th of that Month was employed in giving the Infantry of the Left some Refreshment, and distributing a small Quantity of Ammunition Bread. Towards the Evening, all the Baggage was sent away, and at Night the whole Army began their March to the

Right, and arrived at nine in the Morning, at a Tract of Ground opposite to the Hollow between the Woods of *Sars* and *Blangies*, and on this Side of these Woods and that Hollow.

Prince *Eugene*, who had past the *Troville* with all his Army, except a Body of Troops he left at *Tournay*, and which on the sixth of this Month of *September*, marched in Order to join him, would have found himself in a very incommodious Situation, if our Forces, upon their Arrival, had passed the *Troville*, and posted themselves with the Hollow and the Woods in their Rear.

The Prince, to avoid that Inconvenience, advanced with all his Troops, who were much inferior to ours in Number, and placed them at the Head of two or three little Rivulets that flow from the Woods of *Sars* and *Blangies*. He likewise caused a great Train of Cannon to be advanced, and confined us to our first Situation, by a Cannonade, and a great Skirmish, which continued all the 9th: And the 10th was employed in forming, through the whole Front of the Hollow, an Entrenchment which we carried through the middle of the Wood: We likewise extended the Left of our Infantry along one of the first Projections formed by the Wood; and disposed our Right in the same manner along the Wood, and caused all this
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Body of our Infantry to cut down great Quantities of Timber, for their additional Security.

But as the whole Front was too contracted to contain that of our first Line, we left some Brigades of Foot of our Left, and the entire right Wing of our Horse behind the Wood: We disposed part of our Right in the same manner, and all the Horse of our Right were formed in several Lines, behind the Foot, who possessed the Front of the *Troville*. The Cannon was distributed through the whole Front, as we judged proper; and this was the Situation of our Army.

Before I represent the Defects of this Disposition, it will be necessary to bestow some Observations on the Enemy's Motions from *Tournay* to the *Troville*, in order to make it appear, that we were too remiss in our Attentions to support *Mons*: I shall then consider the Situation of Prince *Eugene*, during the 9th and 10th, which will make it evident, that in all that time, we neglected the Advantages we might have acquired over that General.

The Account I have already given of the Enemy's Motions, when the Citadel of *Tournay* beat the first *Chamade*, makes it very apparent that their Views were directed to the *Haisne*. As we were therefore reduced to the defensive by the Situation of our Affairs;
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our Motions ought to have corresponded with those Indications the Enemy gave us of their Designs: For had we really been apprehensive that either *Charleroi*, or *Namur*, would be invested by their Troops, our March towards the *Haisne* would have enabled us to cover those Places, and consequently all the Right of our Army, ought to have advanced with more Expedition to the *Troville*, which would have saved *Mons*; because it may be reasonably supposed, that the Van of the Enemy's Forces would not have presumed to march through *Havre*, to the *Haisne* as they did, a considerable time before the main Body of their Army, had we been posted on the *Troville*: For as we could then have passed that River in a Moment, we might easily have overwhelmed those Troops that crossed the *Haisne* with so much Impunity. Had our Army, therefore, advanced to the *Troville*, we could have had no reason to be anxious for *St. Gbillian*, which would then have been on our Left, and, when we had past the *Honneau*, we might have been certain that the Enemy would not attempt to throw Bridges over the *Haisne*, between *Condé* and the *Honneau*, in order to invest that Place; because the Left of our Army would then have been posted on the Height of *Condé*. It must therefore be acknowledged, that we were guilty of a great Error
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HISTORICAL *and* MILITARY. 187

in not making that advantageous Motion to save *Mons*, and we were as inconsiderate, after the Conjunction of our Left, and our March to *Malplaquet*, in not improving the favourable Opportunity that occurred to us during the 9th and 10th of *September*, to overwhelm Prince *Eugene* in his Camp of *Sipply*, by our great Superiority over him, in the Course of those two Days.

Let it be only remembred, that the Enemy had left thirty six Battalions, and some Cavalry at *Tournay*, when they quitted that Place; and tho' these Troops marched with great Expedition, they could not join their Army till the Forenoon of the 11th, and only a few Hours before the Engagement.

These two Reflections are sufficient to represent the Fluctuation of Mind that continually attended Marshal *Villars*, who could never determine to save *Mons* either by an Engagement, or any other Motions.

I may add too, that whatever Inclinations he might entertain, to preserve *Mons* by a Battle, they were all extinguished when he beheld the Van of the Enemy's Forces, before the hollow Ground; and he was reduced to the Necessity of sustaining an Attack in a very bad Disposition. For had he been really disposed to engage the Enemy, he ought, upon his Arrival on the 9th, to have advanced into the Hollow with all the Troops it

was capable of containing ; and should have penetrated into the Woods on the Right and Left, with the rest of his Infantry, and have supported their Front by his Artillery and several Lines of Horse. He would then have formed his Attack with an entire Superiority, and might have dislodged the Enemy from the Opening into the Hollow, and formed his Camp on the other Side of that Place, and at the Head of those little Streams that flow from the Woods, and enlarge their Channels as they approach the *Troville*. So that by this Advantage, which was easy to be obtained, he might, at least that first Day, have made it absolutely impossible for Prince *Eugene* to continue between the *Troville* and our Army, even if we had not been so successful in the Engagement, as entirely to have destroyed their Army, which was much inferior to ours, for want of the Body of Infantry, I have already mentioned.

Marshal *Villars* ought to have pursued this Conduct, from what he himself observed the first Moment of his Arrival ; and what he would still have discovered, had he advanced to the Head of the hollow Ground, would have rendered him more sensible of the Consequence of coming to an immediate Engagement. I shall now describe Prince *Eugene's* Situation, with which we could not well be unacquainted, since it depended on the natural Form of the Country. This

HISTORICAL *and* MILITARY. 189

This Prince had his Right to the *Haisne*; his Left to the *Troville* near *Gevries*; his Center at *Sipply*; and the *Troville* and *Mons* in his Rear. His Camp was intersected with the little Streams I mentioned before, and therefore it is evident, that if Marshal *Villars* had posted himself beyond the Hollow, on the 9th, Prince *Eugene* could not have preserved a Communication between the two first Lines of his Army, any otherwise than by throwing Bridges over the Streams at the Head of the two Lines, which would have made it necessary for the Troops to be constantly defiling from one Stream to another.

Prince *Eugene* therefore was not willing to wait for our Army at the Head of his Camp; and tho' by the Absence of those Troops that were left at *Tournay*, and could not join him in less than two Days, he was much inferior to us in Infantry; yet that Circumstance did not intimidate him from advancing upon us, and presenting us with a View of all his Troops and Cannon, with the Hollow in their Front.

This evident Proof that he attended to attack us at the Outlet of that Cavity, should have induced us to enter it, in that Disposition which, as I before observed, we ought to have formed, in order to make our selves Masters of that Situation, and to pass it; because we might naturally imagine, that the
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little Streams, at whose Source we were posted, would greatly facilitate the Extent of our Front before the Enemy; at the same time that it would not be so easy for them to make their Disposition correspond with ours, amidst their Embarrassment from the Streams, that flow in a stronger Current, and are more difficult to be past, in Proportion as they approach the *Troville*; by which means our vigorous Efforts would have easily succeeded, against that part of the Enemy's Army which should appear least capable of Resistance.

The Conveniency likewise of those large Roads that are struck through the Woods, and the Support we might have received from that part of our Infantry which could not be contained in the Hollow Ground, would have enabled us to march our Cavalry to the other Side of those Woods, where we might have ranged them into a more extended Front, than the Enemy could form, since they would always have been obstructed by the Rivulets; and these Troops might have rejoined the Van of our Army, after they had dislodged the Enemy from the Front of the hollow Ground. Instead of which, we neglected to make any Disposition for an Engagement, and were only employed, during the 9th and 10th, in ranging our selves as I have already described, in order to receive
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HISTORICAL *and* MILITARY. 191

an Attack, which, at first, we seemed inclined to offer, for the Preservation of *Mons*; and we permitted Prince *Eugene* to secure the Head of the Rivulets, and to form a Front more extended than our own, which we had contracted at a very unseasonable Juncture.

These Observations may suffice to shew the Errors of this first Disposition; but before I represent the manner in which Prince *Eugene* improved them to his own Advantage, it may not be improper for me to give some Idea of the Disposition we might have formed, in order to receive the Attack to Advantage; since, in my Opinion, I have sufficiently made it appear, that Marshal *Villars* had no longer any Intention to be the Aggressor, when he saw the Enemies advance to the Front of the Hollow.

In order therefore to accomplish this second Disposition, we ought to have entirely abandoned the Hollow Ground, and should have form'd our first Line at a sufficient Distance from that Situation, and have sloped our two Wings of Horse towards the Woods, supporting them at the same time, by proper Bodies of Foot posted in the Thicket.

Had this Disposition been effected, part of which would have been concealed from the Enemy, they would never have presumed to advance into the Hollow to attack us, when we were prepared to receive them
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in a Front more extensive than their own, and whose Arrangement they could only discover in part.

When Prince *Eugene* saw his first Motion to the hollow Ground successful, he judged that we were not fully disposed to attack him, and he likewise concluded, by our entrenching our selves, that the Troops he left at *Tournay*, would have time to rejoin his Army, after which he should be in a Condition to act with all the Freedom he desired.

I have already pointed out the manner in which our Disposition was defective, with relation to the Tract of Ground we possessed ; and it will now be proper to examine in what Particulars it was erroneous, with respect to the Situation in which our Enemies were posted.

We had suffered them to form their Line into a greater Extent than our own, and consequently, when they began the Attack, they might confront and inclose us at the same time. The Woods of *Blangies*, where the Enemy were posted, instead of composing one entire Thicket, shoot out several long Growths of Trees into the Plain: Those Motions therefore which the Enemy were capable of forming, beyond the particular Projection of the Wood, to the hither Side of which our Left extended, were not perceived by any part of our Army : And we were so in-
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judiciously posted towards the Extremity of that Projection, that it did not so much as join our left Flank ; so that the Trees we had cut down on the Edge of the Hollow, created no Obstacle to the Enemy, who were in a Condition to attack us in our left Flank, and in the Rear of our Left, by marching out of the Wood, under the Cover of another Projection of Trees, a little beyond that which he had possessed ; and it was impossible for us to have any View of this Motion, because we had not carried our Attention beyond that Projection which formed the Extremity of our Left. The Woods of *Sars*, which we had to our Right, were shaped almost like those on our Left, only their Projections were not so extended ; but however, as those Woods grew in a bending Sweep, it is certain that the Enemy might likewise make their Approaches to our Right Flank, without being discovered by the Troops, who were stationed in that Quarter.

The Disposition of the Front was altogether as bad ; for the Center of it was opposite to a Farm, which fronted the hollow Ground ; and near that Farm was a small Grove of high Trees. We had suffered the Enemy to secure this Post, which gave them an Opportunity of discovering our whole Disposition, while theirs was entirely con-

cealed from our View. There were also in our Front, several hollow ways, which advanced very near it, and likewise slanted to our Left, which enabled the Enemy to approach that Front without being seen ; at the same time that they could march to our Left, on the Side of the Wood, and to our Right, in the Center of the hollow Ground.

This particular Description of the two Tracts of Land possessed by the Armies, makes it evident, that the Enemies were posted with all the Advantages for beginning the Attack ; since they could engage us through their whole Front, which was more extended than ours, and even without our having any Knowledge either of their Disposition, or their Motions to attack us. Prince *Eugene* was vigilant to improve all these Advantages, in forming his Disposition, which was of such a Nature, that he never sustained a general Engagement, even when he attacked us on every part ; and was in a Condition to defeat us, without incurring any Danger of being defeated himself ; since whatever Advantages might have accrued to us from the vigorous Defence of our whole Front, it was impossible for us to advance, so as to improve our Advantage by a more extensive Front, than we had suffered the Enemy to form.

Towards the End of the 10th Day of the Month, Marshal *Villars* began to be sensible
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HISTORICAL *and* MILITARY. 195

of his bad Disposition; upon which he drew off from the hollow Ground, and ordered such an Intrenchment to be thrown up in his Rear, as he ought to have begun upon his Arrival on the 9th, if he had no longer an Inclination to attack the Enemy.

Our Men began to work upon this Intrenchment, about eleven at Night, but their Progress was so inconsiderable at eleven the next Morning, when they beheld the Enemy in Motion to attack us, that we immediately discontinued that Work, in order to prepare our selves for sustaining their Efforts in the best manner we were able.

Prince *Eugene* led up his Troops before our whole Front, rather in several Columns than in one continued Line; which was sufficient to make us judge, that his Efforts would not be every where equal at the same time, but made in Succession; and that he would conduct them in such a manner as to invigorate them against those parts of our Front, where they should prove most successful.

This Disposition for the Attack, which began to be very evident, should have induced us to vary our manner of Defence, and we ought, at least, in this Conjunction, to have advanced to the Front of our first Line, those useless Battalions, we had posted behind the Woods to our Right and Left: And

they should either have marched up to that part of the Enemy's Front, which was opposite to the Front of our Center, and which they had very much unguarded by drawing off a large Column of Infantry, who were employed in the Attack of our Left, that was stationed in the Woods, from the hollow Ground to the Extremity of our Left; or they ought to have been so disposed as would have obliged the Enemy to recall to their Center, that Body of Infantry who were acting with Superiority against the Forces of our Left, who were only ranged in one Line along the Woods, while they were attacked by several Columns, some of which appeared beyond the Extremity of our Left, and made it very evident they were intended to attack it in the Flank and Rear.

Tho' the Disposition of the Enemy should have caused us to change ours, as I intimated before, we still continued in the same Form; so that the Infantry of our Left in the Woods, were forced, after a long and obstinate Defence; after which the Enemy easily extended themselves towards our left Center, which stretched to the Wood, and they soon dislodged our Infantry from that Situation.

This Disorder obliged Marshal *Villars* to post himself in that Place, with new Troops drawn from our Center, which weakened it too much: And he was wounded in a suc-

cessful Attack he made upon the Enemy, who having possessed themselves of the Wood from our Left, to the Left of the Front opposite to the Hollow Ground, had charged the Left of our Center with great Vigour. When Prince *Eugene* beheld himself Master of the Wood of *Blangies*, he prepared to make new Efforts against our Right, and even in Succession against our Center, which he saw unguarded by our drawing of our Troops from thence, to the Left, without causing those of the second Line of Infantry to advance, in order to fill up the Intervals of the first, which was only supported by the Household Troops, and some Cavalry of our Right. These Efforts against our Right, succeeded in part, but our Disadvantage was retrieved by some Brigades of Infantry who advanced, and gave the Infantry of our Right Time to recover their Order. The Attacks made by this Prince upon our grand Center, were more successful; for our Infantry did not perform their Duty, and abandoned that Intrenchment, even before the Enemy were in a Condition to assault it; in consequence of which the Prince soon posted his Infantry there, advanced his Cannon, and past a considerable Body of Cavalry through the Intervals of our Intrenchment. This Cavalry, indeed, were unable to sustain the Charge of ours, who forced them from that Intrench-

ment; but then our Cavalry suffered extremely from the Fire of the Enemy's Infantry, who possessed the Intrenchment we had abandoned, as I have already observed.

It may perhaps be thought strange, that I have not, as yet, taken any notice of Marshal *Boufflers*. But he had not any Command in the Battle, till he received Intelligence from Marshal *Villars*, that his Wound had rendered him incapable of acting any longer. This new General, then, who had only charged several Times, at the Head of the Household Troops, with distinguished Bravery, and might have been sensible that the Enemy, notwithstanding their great Advantages, had not presumed the whole Day, to pass entirely thorough the hollow Ground; never had the Presence of Mind to advance his Right and Left Wings to the Front of that Hollow, nor to form the Army into the second Disposition I have mentioned above. It has been said he received Intelligence, that all our Left Wing of Cavalry, and the Brigades of Infantry on our Left, who, as I have already observed, had been posted, to no Effect, behind the Woods, were retreating by *Quievrain* (tho', till this Moment, not one of the General Officers ever acknowledged that he gave Orders for that Motion) and that it was the Account of this Retreat,
made

made without the Direction of the General, which obliged him to draw off all the Right by *Bavai* to *Quesnoi*. So that the King's whole Army retired without Opposition or Pursuit, half by *Quiévrain* to *Valenciennes*, and half by *Bavai* to *Quesnoi*.

This Particular Relation of the Arrangement of each Army, and the principal Motions during the Action, make it evident: 1st, That the Disposition on our Part was very defective. 2^{dly}, That the King's Army received an Attack, tho' they marched from *Quiévrain*, with an intention to offer it. 3^{dly}, That the Enemy, by the Advantages of their Disposition, did not engage in the Action, but to such a Degree as they were sensible their different Attacks would be successful, and knew, at the same Time, that it would be impossible for us to derive any Advantage from the great Loss of Men they would sustain by our vigorous Defence; because we could be in no Condition to advance upon them in a contiguous Front, and more extended than that which their whole Army formed. 4^{thly}, Tho' during the Continuation of the Engagement, the Advantage was visibly on the Enemy's Side, it is certain however, that all the Glory they would have gained by it, would have been the Loss of four times the Number of Men who were killed on our Part, had our Army been ran-

ged in the second Disposition I have before described.

The Proof of what I advance, is not to be invalidated by the Fact it self; since it is publickly known, that our Forces, who separated into two Bodies in their Retreat, and left a Space of more than three Leagues between their Right and Left, were not pursued by the Enemy, to whom we resigned the Field of Battle; and that even all our Artillery, which was drawn off, over the Bridge of *Horn* on the *Honneau*, between our Right and Left, and only guarded by our Body of Infantry appointed for that Service, was not intercepted in its Conveyance over a spacious Plain; and in fine, that the Enemy were not sensible of their Victory, till the 12th in the Morning, when they found themselves Masters of the Ground, which they imagined we still possessed, and where, indeed, we ought to have continued.

It appears by my Discussion of the great Actions that have past, since my engaging in the Service, that not one of them had a perfect Similitude to any other; and therefore it may be concluded, that the Generality of Fortunate Events are owing to a good Disposition, and the Superiority of Genius in the General who gains the Battle: And that almost every unsuccessful Event may be imputed to a defective Disposition, and the Timidity,

midity, or want of Judgment in the General who is defeated. It is the Interest therefore of a Prince, to be well acquainted with the Capacity of a General, to whose Conduct he entrusts the Command of an Army; and not to be influenced in his Choice, by favourable Prepossessions, or the private Views of his Ministers, in their Recommendations of Candidates for that Promotion.

C H A P. XXXII.

Of Blockades.

I Have not seen any Instances, wherein a distant Blockade alone, ever obliged a fortified Place to surrender: But I have seen several Places besieged, whose Loss has been hastened by a remote Blockade, which cut off all Supplies necessary to their Subsistence or Defence.

Several of those Sieges in *Flanders*, which were formed by the King of *France* in Person, during the War that was antecedent to the Treaty of *Nimeguen*, were of this Nature. *Valenciennes* was blocked up by *Condé* and *Bouchain*, that were taken in the preceding Campaign. *Cambray* was blocked up at the same time, by *Bouchain* and the Places in *Artois*. In

In the War that preceded the Treaty of *Reswick*, *Mons* was, in a manner, blocked up by *Valenciennes*, *Condé*, and *Maubeuge*; but the Extent of this Blockade was contracted, by fixing a considerable Post in *St. Ghillain*, during the Winter Season. When the Siege of *Charleroi* was form'd in 1698, that Place was in a manner blocked up by *Namur*, *Philippe-Ville*, *Maubeuge*, and *Huy*.

This manner of blocking up Places, chiefly by Bodies of Horse posted in the adjacent Towns of Strength, is much more commodious than any other; because the Troops who are charged with the Blockade, are not so much fatigued as they would otherwise be, were they stationed in Villages, or any other unfortified Places, which they must then guard and accommodate to their own Security, as well against the Garrison it self, should there be no Communication between these Posts, as against the Enemy, who may assemble their Forces, surprise one of these Quarters, and introduce a Convoy, or throw Succours into the Place.

The only Blockade I have seen, where a considerable Body of Horse or Foot fix'd their Quarters very near a fortified Place, was that of *Mons*, in 1678. The Enemy, who were rendered more circumspect by the preceding Loss of their Towns, judg'd it necessary to leave a great Body of Troops in
Mons,

Mons, who, in case it should be invested, before the usual Season for opening Campaigns, might protract the Siege, till an Army could be drawn together for its Relief. But as a large Magazin of Corn was necessary to subsist, for a considerable Time, such a Number of People, and so strong a Garrison as were then in *Mons*; his Majesty concluded, that as this Town was not sufficiently stocked with Provisions, it must be reduced to great Distress, after it had, for some Months, sustained a Blockade, formed by several great Quarters, which composed a kind of Circumvallation.

Monfieur *de Montal* was charged with the Conduct of this Blockade, which continued several Months, and prevented the Enemy from introducing any considerable Convoys into the Town. This, in time, would have had the Effect of a more expeditious Reduction, had we formed a regular Siege towards the close of the Campaign; because M. *de Luxembourg*, who commanded the King's Army in *Flanders*, had Orders to support the Blockade. But as the Enemy were sensible that the Preservation of the Place could not be effected without raising the Blockade, their Endeavours to succeed in that Operation, occasioned the Battle of *St. Dennis*, which I have described in another Place.

I, there-

I, therefore, shall not recommend this manner of Blockading a Place from Quarters at so small a Distance from it, unless the Inhabitants happen to be so numerous, and their Stock of Provisions so inconsiderable, as to make it almost seem impossible for the Blockade to be long continued, without reducing the People to extream Want : And when the Assailants have likewise an Army to observe that of the Enemy, and which renders them so much Masters of the Country, as to secure them from any Apprehensions of being obliged to raise the Blockade: For the Surprisal of a single Quarter, occasions the Loss of all the rest; and the Troops who were posted in those Stations, will not have sufficient Time to reassemble, in good Order, before an Enemy, whose Forces are already drawn together.

I have not seen any Instance of a Blockade, where an Army lay within the Lines of Circumvallation, with the sole Intention of taking a Place by a Blockade. I have only mentioned this Operation of War in my Maxims, that I might not omit any Circumstance within the Possibility of Execution; and I then observed, that this Case can only happen when a defeated Army withdraws to a Town incapable of affording it any long Subsistence.

The

The manner of taking Places by distant Blockades, is practised in *Hungary*, where the Malecontents, not being in a Condition to form Sieges of Towns defended by the Emperor's Garrisons, have made themselves Masters of several, by not permitting the People to cultivate their Lands, and preventing the Garrison from making Excursions into the adjacent Parts, to supply themselves with Corn and other Necessaries.

But these Blockades have not always succeeded, and the Assailants have been frequently obliged to raise them, at the Approach of the Emperor's Army, and have afterwards repeated them several times, before they gained a favourable Event; because as their Troops are, in reality, no more than a confused Multitude drawn together, to make Excursions into the Country, they are unacquainted with the Solidity of disciplined Bodies; and whenever they are approached by the Emperor's Troops, much inferior in Number to their own, they are always compelled to abandon these Blockades, and the *Imperialists* introduce the Convoys they have escorted, into the Place. But whenever they retire, the Blockades are formed anew. 'Tis true, a perpetual Care for the Preservation of those Places, and the Subsistence of the Garrisons, becomes extremely inconvenient in Time, and consequently has

has already occasioned the Loss of several Places.

C H A P. XXXIII.

Of the manner of investing Places.

THIS Subject will not furnish me with any Reflections on those Sieges at which I have ever been present, because the Measures for succeeding have always been concerted with so much Judgment and Precaution, that I never saw a Siege either raised, or ill conducted in any material Circumstances, by those who were charged with that Operation. The Day-Light, indeed, may have sometimes afforded the Besiegers an Opportunity of posting themselves in better Order, and with more Security than they were able to accomplish in the Night; and when an Army has advanced to the Place they proposed to invest, they may have been sensible, that neither the Descriptions of others, nor the Delineation of Maps or Charts, have been so perfect in every Particular, as not to make some Change, in their intended Dispositions, necessary. I shall therefore only relate three Instances of Sieges that have been formed in the present War, without investing

vesting the several Places in a regular manner, and it will then be evident, that this new Practice ought to be entirely rejected.

In the Year 1705, the Enemy had besieged *Haguenau*, in which Marshal *Villars* had left some Battalions under the Command of Monsieur *Perry*. As the Enemy had formed this Siege in the Rear of their Army, they thought it unnecessary to invest the Place in a regular manner: Monsieur *Perry* made as brave a Defence as possible, but as he found it impracticable to make a long Resistance, he ordered the *Chamade* to be beat a little before Night, and insisted upon such advantageous Articles for the Garrison, that the Enemy immediately rejected them, and the Hostilities were renewed. In the mean time, Monsieur *Perry* sent away all the Baggage and Ammunition of the Garrison, under a strong Guard, through a Quarter that had not been invested by the Enemy; after which, the Garrison evacuated the Place, leaving only a few Men in the Angles of the covert Way, to continue the Fire; and they were not made acquainted with what had past, lest any Deserter should give the Enemy Intelligence of the Garrison's Retreat. When Monsieur *Perry* thought himself at a sufficient Distance from the Place, he sent a Party of Soldiers to bring off the Men he had left in those Posts, and they retired with-

out the least Opposition. Thus did he withdraw the whole Garrison, and rejoin the Army, without losing one Man in his Retreat. The Enemy were unacquainted with this Motion till the next Day, when the Garrison had advanced too far to be overtaken by any Body of Horse, that the Enemy might have dispatched to pursue them.

This is a very singular Instance, and it merited some distinguished Marks of the King's Approbation; but it shews, at the same Time, the Necessity of investing a Place in Form. And I think it proper to acquaint those who are ordered to besiege a Place, with fewer Troops than are necessary to invest it in a compleat manner, that there is noe sure Precaution to be taken against such an Event as I have now described, which is to post proper Bodies of Troops in the Night near the Gates, and in all the Avenues contiguous to the Place; and to cause the Cavalry to extend themselves over all that Tract of Ground that could not be invested: For if a Garrison is once discovered, they will never presume to pursue their Retreat; and they must unavoidably be defeated, if they are attacked at such a Distance from the Place, as to prevent them from regaining it.

At the Close of the same Year, 1705, the Duke of *Vendôme* undertook the Siege of *Verrua*, without any Intention to invest the Place,

Place. This City is seated to the South of the *Po*, upon the Range of Mountains, which bound that River from *Montcallier* to *Cazal*. Its Fortifications are extended to the Bank of the *Po*, which there forms an Island, where a Redoubt was raised, to secure a Bridge of Communication from *Verua* to *Crescentin*, where the Duke of *Savoy* was then posted with all his Troops.

It appears, by this Account, that *Verua* was but half invested, and that it enjoyed a free Communication, by the River, with the Army of the Duke of *Savoy*, who daily supplied it with fresh Troops and Ammunition, as well as Provisions. This Siege therefore was of a long Continuance, and it not only cost us a vast Number of Men, but was likewise attended with infinite Expence to the King; and it would undoubtedly have been drawn out into a greater Length, if the Duke of *Vendôme*, who had always attacked the Place in that Part which fronted the Mountain, had not found Means to advance to the two Sides of the Island, a Body of Foot who attacked the Bridge of Communication, and the Post in that Island, with so much Vigour, that they carried it at last. After which the City was deprived of its Communication with the Duke's Army, and held out but a few Days longer.

This Instance of the Siege of a Place without investing it, is sufficient to prove that it is entirely contrary to the Rules of War, to undertake a Siege without investing the Place, and making it impossible for it to be defended by any Forces or Expedients, but what are inclosed within the Walls: For it is certain, with Respect to *Verua*, that while the Communication with *Crescentin* could be preserved, the Duke of *Savoy* was in a Condition to make the Place hold out till it had been reduced to Ashes; and then he would have abandoned it, as Monsieur *Perry* quit-
ted *Haguenau*, and even with much more Facility.

The third Instance of a Siege, without investing the Place, is that of *Turin*, which was fatal to *France*. The Duke de la *Feuillade* was charged with the Execution of this great Enterprize, but I shall confine my Observations to the Errors that were committed in Contradiction to the Rules necessary to be observed in the manner of investing Places. The main View in this Operation of War, should be to deprive the Besieged of all Communication with the adjacent Country, and to make them incapable of introducing any Succours into the Place. To render the Instances of Misconduct in this Siege more apparent, I shall describe the Situation of *Turin*, and the Disposition of the Country
around

HISTORICAL *and* MILITARY. 211

around it; by which it will be evident, that this important Expedition would have had a happier Event, had it been conducted with Judgment.

Turin is situated on the North Side of the *Po*, in a very level Plain, divided by the *Doria*, which flows into the *Po* a little below *Turin*, after it has distributed part of its Waters through the City by two Canals, which, besides the other Accommodations they afford, serve to turn several Mills that contribute to the Support of the Inhabitants. The Citadel is a regular Pentagon, and is situated between the Roads to *Susa* and *Pignerol*. Its original Fortifications are very ruinous, but the Duke of *Savoy* has lately added several strong Out-Works, judiciously form'd by the Plan of the old Fortification. The only Suburb is that of *Balon*, which extends directly to the *Doria*, on that Side where the Road is carried on to *Chivasso* and the *Veneria*. This Suburb has been crowned with three Horn-Works that were not covered at the time of the Siege: That on the Right, with Respect to the Place, is nearest to the *Po*, and covers the Way that leads to the old Park; that in the middle is the largest, and covers the Suburb; beyond it is an Advance Fosse, which is supplied with Water from the *Doria*: That to the Left covers the Bridge of the *Doria*, and the Roads that are

struck out to the *Veneria* and *Chivasso*. On the other Side of the *Po*, a Chain of Mountains rises at *Montcalier*, and extends along the *Po*, to *Cazal*. That Part of the Mountain opposite to *Turin*, is covered with little Hills, several of which the Duke of *Savoy* had inclosed with an Intrenchment, capable of containing six times the Number of Infantry he then had; he had likewise raised several Forts and Redoubts within the Intrenchment, and even to the highest Summit that hangs over the Road to *Chiery*.

Such was the State of *Turin* when M. *de la Feuillade* approached it, and he ought to have invested it on the exterior Situation I last described: To which I may add, that the Duke of *Savoy* was then in the City, with all the Remains of his Infantry, and the greatest Part of his Cavalry, together with all the Infantry he had received from the Emperor.

As I have been so particular in this Description, to render the Errors committed by M. *de la Feuillade* more evident, I shall therefore confine my self to the Circumstances relating to this Subject.

When M. *de la Feuillade* arrived before *Turin*, he should have esteemed it his main Advantage to invest the Place in such a manner, that the Duke of *Savoy*, who was then shut up there with all his Court, and Troops, might

might have no Opportunity to retire from the City; because our General might have been very certain, that the indispenfible Neceffities which attend a Place regularly befieged and invested, would have obliged it to furrender in a fhort time; efpecially when the Prefence of the Prince and his Court, encreafed the Confumption of Proviſions. In order therefore to inveſt the Place, in ſuch a manner as would have effectually ſhut up all thoſe who were then incloſed within the Walls, *M. de la Fleuillade* ſhould have carefully conſidered the Conſtruction of *Turin*, after he had fully obſerved the Nature of the adjacent Country.

The City has four Gates: That of the Palace opens to the Suburb of *Balon*, and *Chivaſo*; that of *Sufina* leads to *Suſa*; the Gate of *St. Peter* is an Outlet to *Pignerol*; and that of the *Po* begins the Way to *Chiery*, by the Height of *Montcalier* along the *Po*, and turning to the Right after croſſing the Bridge; and to *Verua*, by ſtriking to the Left, after paſſing the Bridge of the *Po*. The only Gates of the four, from which the Duke of *Savoy* could derive any Advantage during the Siege, were thoſe of the *Po*, and the Palace. The former afforded him a Communication with the Poſts on the Hills, with an entire Liberty either to enter or quit the Place, by ſeveral Ways, remote from each other, as I have

already observed. The latter opened a Communication with the Suburb of *Balon*. But I may even affirm, with relation to the investing of this Place, that the Duke of *Savoy* could not have any advantageous Communication with the adjoining Country, but by the single Gate of the *Po*.

When a General forms a Siege, he should make it his first Care to invest the Place as compleatly as possible: But this Precaution was neglected by *M. de la Feuillade*; and he only disposed his Army from the Upper *Po*, to the *Doria*, and fixed an inconsiderable Quarter between this River and the Lower *Po*, to secure the Convoys that came from *Chivasso*. This Quarter was not even covered by any Lines, as I shall observe more particularly, in the Sequel of my Reflections; and Lines were only drawn from the Upper *Po* to the *Doria*; so that the Duke of *Savoy* had the free Use of the two Gates of the *Po* and the Palace, during the whole Siege.

In order to invest *Turin* with Success, the following Conduct should have been observed. Before the Army arrived at the Place, the Cavalry should have been separated from the Infantry, and stationed in the Plain, from the Upper *Po* to the *Doria*, to prevent the Duke of *Savoy* from retreating with his Court and Cavalry, from the Gates
of

of St. *Peter* and *Susina*; for he could never have attempted that Motion with any Probability of Success, through the Palace Gate, and the Suburb of *Balon*. All the Infantry ought to have been posted on the Heights, in order to dislodge the Duke of *Savoy's* Troops from that Situation. When this had been accomplished, we ought to have destroyed the Works that covered the Suburb of *Balon*, and then the Place would have been regularly invested.

The Measures in forming the Siege of *Turin* having been ill concerted, and the Place besieged four Months, without being ever invested, it can hardly be thought surprising, that the City was not taken; tho' the Provisions the King furnished for this Expedition, were infinitely greater than those with which he had formed Sieges in Person.

These three Examples which I have related, afford the clearest Confirmation of the Maxims I have offered, with Reference to the Method of investing Places, which ought to be accomplished in the most perfect manner, without sustaining any Risque of being unsuccessful in the Siege; but if this Operation should happen to be defective, the General should, at least, use all the Expedients in his Power, to prevent the Admission of any Succours into the Place.

216 M E M O I R S

If *Haguenau* had been invested, the Garrison could not have quitted the Place without any Molestation, when they were incapable of defending it any longer. Had *Verua* likewise been invested, the Garrison could not have received constant Reinforcements, nor could the Place have been supplied with the necessary Provisions for its Defence, and the Loss of Men in taking it, as well as the Expence and Time, would have been much more inconsiderable. If *Turin* had been regularly invested, it would have been difficult for the Duke of *Savoy* to have quitted it in Person; the greatest part of his Court must have continued in the Place, where their Destruction would have been inevitable; and Prince *Eugene* could never have raised the Siege, as I shall shew in my Reflections on the Attack of Lines of Circumvallation.

I conclude from all these Instances, that a General commits a capital Error, when he neglects the regular investing of a Place he intends to besiege.

CHAP.

C H A P. XXXIV.

*Of Camps entrenched under the Walls
of Towns.*

I Shall confine my Reflections on this Subject, to those entrenched Camps I have seen, and which have not been attacked, like that of *Schellenberg*, under *Donawert*, the Reason of which I shall unfold in the Sequel of this Chapter.

I have before observed, that we derive the modern Practice of entrenching Camps under Places, from the *Turks*. The Constructions of ours is indeed very different from that of their *Palangues*; but this is owing to our Variation from them, in the manner of making War. It is a Maxim with them, to be only attentive to the Preservation of some great Town, at the Head of a Country, and to fortify such a Place alone, to a considerable Degree. However, as they are sensible of the Necessity of being covered, in the Course of their Wars, and acquire this Conveniency in other Towns, which they are not inclinable to guard with Troops, because they would have their Armies as numerous as possible; they generally think it sufficient to

fortify those Towns with good Ditches, and Parapets planted with Palisades, but frequently without Flanks; and they have no regard to the Regularity of a Fortification.

We have experienced this Practice to be good, and have improved it with as much Regularity as was consistent with a reasonable Expence. It was proposed by the Marshal *de Vauban*, who likewise plan'd the proper Construction for the Defence of several Places. His Scheme may possibly have been too extensive to be useful; for I would be very moderate in this Species of Fortification, and as excellent as I may believe it to be in one Instance, I am persuaded it would prove pernicious, were it multiplied to any considerable Degree. The Reason is evident; for if an intrenched Camp be not sufficiently guarded, it will be prejudicial, rather than advantageous, to the Place it is intended to protect: When such Camps have a compleat Guard, there can no longer be any Army in the Field.

The first intrenched Camp I have seen, was formed by *M. de Luxembourg*, in the Year 1672, to cover the Suburb of *Utrecht* towards *Holland*. This General had a numerous Cavalry, and not being able to cover them in the Town, when the Season for disposing them in Winter Quarters was not sufficiently

ently advanced, he intrenched them under the Suburb, and posted some Battalions with the Cavalry, for a Guard, which proved a very sure Expedient.

In the Year 1677, an intrenched Camp was formed under *Brisac*, in an Island of the *Rhine*; but it was only intrenched on the Side of *Alsatia*, and all its Fortification consisted of a Parapet, which was continued along the *Rhine*; because when that River flows in its usual Channel, the Body of Water is very inconsiderable: If the intrenched Camp therefore, had not been covered by this Parapet, it would have been exposed to Insults from the Enemy, when the Waters were low. This Camp was formed for two Reasons; the one, that it might be a commodious Post, for more Troops than could be disposed in the Lodgments and Barracks of the Town, at a time when it might be necessary to have a considerable Body of Troops at *Brisac*. The other, for the Conveniency of the Convoys of Provision; the Horses and Waggon employed in that Service, being lodged in the Camp, while the King's Army lay on this Side of the *Rhine*; it likewise facilitated the Supplies of Bread from *Brisac*, which, without this commodious Post, could not be transmitted to the Army, without interrupting the free Use of the Bridge, which would then have been incumbered with the Carriages.

ages. The Camp was always sufficiently defended by this single Parapet along the Arm of the *Rhine*, because it was in such a Situation as rendered it inaccessible to the Enemy, unless their whole Army had been posted on this Side of the *Rhine*.

The third intrenched Camp that I have seen, was that of *Liege*, which was formed by the Orders of *William of Nassau* King of *England*, to protect that great City, which could not be fortified without infinite Expence, and to cover, by this Expedient, its little Citadel on the Side of *Brabant*. This Camp was well disposed on the Height fronting the Citadel; the Trenches were wide and deep, and the Parapets Cannon proof; I have seen it contain 40 Battalions, and as many Squadrons.

M. de Luxembourg made his Approaches to this Camp in 1693, with all the seeming Dispositions to attack it: But as I have already observed in another Place, his real Intention was only to induce the Enemy to throw more Troops into that Camp, which they accordingly did, the Consequence of which was the Battle of *Nerwinden*. This Camp therefore, did not sustain any Assault; for if our Troops had attacked and carried it, the Loss of it would have been presently succeeded by that of *Liege*: It is a great Defect, therefore, in this Species of Fortification,

tion, to make it the Capital Security of a Town, since it only ought to facilitate the Defence of the Place it covers, the Loss of which immediately ensues that of the intrenched Camp,

The fourth intrenched Camp which I have seen, was that which the *Spaniards* began to form before the Castle of *Namur*, and which we neglected to compleat after we had taken that Place in 1694. This Camp had a very advantageous Situation, and could not easily be incommoded by the Enemy's Cannon. Its Right Flank was partly covered by the City, and the Out-Works of the Castle, towards the *Sambre*, which are comprehended within that Camp. The left Flank extends to the Summit of the Mountain, whose Reverse might be easily rendered impracticable; and the Front would be greatly improved by compleating the Ditch, and extending some strong Redoubts, planted with Cannon, along that Front. But as these Precautions were not taken, when *Namur* was attacked by the Enemy, in 1695, and defended by Marshal *Boufflers*, this Camp was entirely useless for the Defence of the Castle.

These are all the intrenched Camps I have seen under the Walls of Towns, and which were not attacked. The last I shall now describe, is that of *Schellenburg*, under *Donawert*, which was attacked and carried in the Year 1704. The

The Height of *Schellenburg* had been formerly intrenched by *Gustavus Adolphus* King of *Sweden*, and the Elector of *Bavaria* had ordered it to be restored to the same Condition; but it happened not to be compleated when it was attacked. This intrenched Camp was intended to contain a Body of Forces, as well for the particular Security of *Donawert*, as to preserve a free Communication between the Upper and the Lower *Danube*; in case *Franconia* should be made the Seat of the *German War*. The Front of this Camp was good, but the Branches which extended to the covert Way of the Place, were too long, and had not any Flank for their Defence; neither were they sufficiently protected, either by the Covert Way, or the Place it self. As this Work had been but lately undertaken, the Front was the only part of it that was in any Condition of Defence, while the Branches were not secured from the Insult of the Enemy: So that tho' it could not be forced in the Front, where the Enemy made their first Effort, it was penetrated by the Branches, tho' that Success was accidental. The Darkeness of the Night is favourable to those who are timorous. The Assailants, who were under the violent Fire of the Front, endeavoured to consult their own Security, and extended themselves to the Flanks, which they found imperfect,

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and

and almost unfurnished with Troops; whether their Number was insufficient to guard the Camp effectually, or whether the Branches were neglected, during the Attack in Front, or that the bad Disposition of the Forces in the interior Parts of the Camp, occasioned this Omission, is uncertain. But these pusillanimous Troops, who had stretched to the Branches, had involved, in that Motion, those who were braver than themselves, and who, when they found but a feeble Resistance, mounted the unfinished Parapet, and charged those Troops in Flank, who sustained the Attack in Front; threw them in Disorder, and forced the Camp.

The Elector of *Bavaria's* General Officer, who commanded the Troops in the Camp, taxed the Commanding Officer of *Donawert* with neglecting to defend the Covert Way, in contradiction to all the Instances made to him to that Effect. If the Enemy had sustained any Fire from the Branches, they might possibly have found it difficult to extend themselves in the manner they did. But the Branches of this intrenched Camp were drawn into an immoderate length, and rendered indefensible by their Form. And therefore it was not surprising that they happened to be forced, since they had an essential Defect, which exposed them to a general Insult.

This

This single Instance of carrying a Camp intrenched under a Place, by main Force, justifies my Maxim on this Subject, which I have inserted among those that relate to the Attentions necessary to be observed, as well in the Choice of a Situation for an intrenched Camp, as in the manner of its Construction. And it likewise makes it evident, that these Camps are as useful, when they have been fortified and compleated as much as possible, as they are dangerous when they are ill situated, imperfect, or badly defended.

After these Remarks on Camps intrenched under Places, it may be necessary to observe, that intrenched Camps may be form'd, on some Occasions, in the open Field, and where a Body of Forces intrench themselves in a chosen Situation, which they believe to be unattackable. There have been some Instances in *Italy*, during the present War, of Camps intrenched, by a small Body of Troops, in the open Field. And as the Construction of these Camps is a modern Invention, and entirely owing to the *Germans*, I call them *Places of a German Model*; because this Fortification has, in Reality, no Similitude to an intrenched Camp, either in its Extent, or on the Account of any Protection it can afford particular Places; but it derives its Defence from its own Disposition, and constitutes a regular Fortification in a few Days,
with

with a Solidity that will be Cannon Proof, long enough to make it necessary for the Enemy to assault it in Form; tho' it must be acknowledged, that a Camp of this Nature, cannot last above two Years, for the Reasons I shall hereafter assign.

The manner of preparing such Camps is this. The intended Form of the Place is traced out with a Rope, along which are disposed large Piles of Fascines, four or five Feet in Circumference, and strongly bound together, at each repeated Distance of half a Foot; and of the same Length from one Angle to the other. The first Pile is fastened to the Earth with a large Quantity of good Pickets. In this manner are three or four of such Piles placed behind one another, in Proportion to the design'd Thickness of the Fortification, and the Earth which is scooped out of the Ditch proposed to be sunk, is thrown between these Piles, which are heightned with new ones, placed over the others, in the same manner as the former were fixed, and they are thus continued, till the Fortification has acquired its intended Height.

When a Place is fortified in this manner, it is preferable to one of Earth, in several Respects. The Cannon can make but one Aperture, at most, and this never penetrates the whole Mass, because the Effort of the

Ball being deadened by the first Pile of Fascines, which is well compacted, it stops at the second Pile, or at least never breaks into the third. The artificial Fires are always ineffectual, because the Piles are constantly moistened by the Earth that lies between them; but should they happen to be kindled by those Fires, the Fortification would not sustain any ruinous Effect. The oblique Batteries are but little detrimental, because the Ball can hardly penetrate this Pile, which is firmly bound together, and riveted to the Earth with Pickets; and even the Bomb that falls upon the Breadth of this Fortification, is not very injurious, because its Effect is obstructed by the different Ranges of Piles that are always contiguous, and closely compacted with Pickets. In a Word, this new Invention seems, in my Opinion, very useful on proper Occasions, and the only Circumstance to be apprehended, is the rotting of the Fascines, which is an Effect that constantly happens, at the End of two Years.

I was once charged with the Attack of a Place, or intrenched Camp, so oddly disposed, that I think it will not be improper to mention it; because the Particulars may be very instructive to my Son, in case he should ever be engaged in a Conjunction of the same Nature.

The

The *Barbets* having advanced into the Valleys of *St. Martin*, at the Close of the Year 1689, I received Orders, in the Spring, to attack and drive them out of that Country. One of the extreme Parts of the Valley is bounded by a great Rock, almost entirely separated from the other Mountains, and which is called *The four Teeth*, on account of its Form. To this Rock did the *Barbets* always retreat, as to a sure Sanctuary, in all the Wars they sustained against the Duke of *Savoy*, their antient Sovereign; and this was the Place where I obliged them to take Refuge.

My first Difficulty was to form a Circumvallation of this Rock, where I intended to destroy all the *Barbets*; because the different Projections that join it to the other Mountains, furnished these People with so many sure Expedients to escape me on one Side, while I attacked them on the other. However, I at last succeeded, by my Application in placing Troops round the Rock; and they were disposed in such a manner, that tho' the Voice could be communicated from Troop to Troop, yet it was impossible to march from one Troop to another, in a less Space of Time than eight Hours; because the nearest Communication could only be made by traversing the Projection that extended between the Rock, and the Soldiers who were

posted opposite to the *Barbets*, at the Distance of half a Musquet Shot, from the Fire of which they were unable to cover themselves by any Parapet, because the Rock was higher than the Situation where they were posted.

When my Circumvallation was compleated, I endeavoured to make the necessary Dispositions for a general Attack. The Rock was divided from the other Mountains, in two Places, by a couple of Torrents, which ceased to roll down the Declivities, in those Seasons, when the Snow was no longer melted on the Mountain; but the Edge of one of the, Torrents was covered with a Parapet, form'd of large round Flints, behind which the *Barbets* posted themselves in Order to fire, and where the globular Form of the Stones left but small Apertures to receive the Muzzles of their Fuses. The Torrents could be only approached from my Situation, by a narrow Track in the Rock, where only one Man could march in Front, but when an Advance was once made to the Border of the Torrents, there was a sufficient Opening for the Troops to extend to the Right and Left, in a Front equal to the Length of the Parapet, behind which the *Barbets* were screened. The Rock, in two other Places, extended to the Mountains, without any intermediate Fall of Water, but the Conjunction was made by
such

such Prominences as were impracticable to Man, as far as I could judge.

As I could not discover that all my Attacks had produced any Effect, I made a particular Disposition for each distinct Attack, and ordered Signals to be given, to inform the separate Bodies of Troops of the Effect resulting from it, and which they could not otherwise discover; I likewise placed upon a very high Rock, which commanded an entire View of the whole Operations, a judicious Officer, who had my general Disposition in Writing, with a Flag to give the Signals, according to my Intention, and at the exact Time when they ought to be made. I then chose the Edge of the Torrent for my particular Attack, because I imagined it to be a Situation where my strictest Attention would be most necessary, to gain the Success I desired. I then provided each Soldier chosen for this Attack, with a Fascine very compact, and thicker than his own Body, and stuck upon a long Picket, which trailed upon the Ground, and enabled the Soldier to carry the Fascine before him, in order to be covered in his Advance, and which might be drawn out of the Fascine by Degrees, as he approached the Edge of the Torrent. My Intention was to descend, in this manner, by the little Path that led to the Torrent, and with this Protection from the Enemy's

Fire; and to extend my Forces to the Right and Left of the Torrent, with the Advantage of being thus covered by the Fascines.

I began my March a little before Day, and by that time it was light, had posted my Troops along the Torrent, having only sustained, till then, a few random Vollies from the Enemy. I likewise found Means, by the Aid of a Capstan, to draw a short Piece of Cannon, that carried a four Pounder, on a Sledge, which was also shrowded with Fascines, for the Security of the Officers who were to fire it on the Brink of the Torrent, and at the Distance of eight or ten Feet from the Enemy's Parapet. This Piece, at the first Fire, had such an Effect against the Wall of Flint, that it made a considerable Breach, and the Report of the Cannon, which the Enemy did not expect, filled them with the utmost Terror, and animated the Soldiers of my Attack to such a Degree, that they immediately threw themselves into the Torrent, which happened to be very shallow that Day, and forced the Intrenchment, to the Destruction of all who opposed them. At the same time, the Officer who had the Flag, made the proper Signals to the other Attacks; so that in less than two Hours, the Rock was forced in its entire Circuit, and all the fugitive *Barbets*, who had made it their Retreat, were slain, except 25, who found Means

Means to escape, by that Side where I had charged Monsieur *de Clerembout* with the Attack.

I rank the Intrenchment of this Rock in the Class of intrenched Camps, because there was no particular Habitation in that Place, and the barbarous People who assembled there, had intrenched themselves on the Edge of the Torrent, in the manner I have described, and opened the other Avenues on the Side next the Mountains: And it is evident, from these Particulars, that the Attentions necessary to be observed, in the Attack of a Post whose Situation is very peculiar, and its Fortification not adjusted by the Rules of Art, are much greater than those that are to be pursued in the Assault of a regular Fortification, which may be comprehended by the Eye; because it was necessary to foresee, in the present Conjunction, that the Peculiarity of this Situation, would create several unknown Obstacles, and it is impossible to judge what Effects they will produce in the Minds of the Assailants, into whom we must endeavour to infuse a Persuasion of Success, in consequence of the good Disposition into which they have been formed for the Attack.

C H A P. XXXV.

Of Lines of Circumvallation.

I Am now to treat of Lines of Circumvallation, and Contravallation, which are drawn round a Place intended to be besieged. I have elsewhere described the Manner of their Construction, as well as their Use, and by what Means they are to be defended; tho' this is an Operation to which the Soldiers should be as little exposed as possible. And in order to evince the Inconveniencies of such a Defence, I shall only relate some Instances, with Regard to this Article, that happened in my Time.

When the Prince of *Orange* formed the Siege of *Oudenard*, in the Year 1674, the Lines that were drawn round his Troops, were injudiciously marked out. The Prince of *Conde*, who would not suffer him to take that Place, which was ill provided for a Defence, assembled, as soon as possible, all the Troops he could draw from the Garrisons in *Flanders*; and when they had joined his Army, he advanced to the Enemy, through the Country that is extended between the *Lys* and the *Scheld*. He believed, very justly, that the Prince

Prince of *Orange*, instead of waiting for him in his Lines, would put his Troops in Motion, to attack him in his March; for which Reason the Prince of *Conde*, when he left *Espiers*, made the proper Dispositions for an Engagement, if that should happen to be necessary, and pursued his March with all the Attentions I have described, in the Article of Marches. When he approached the Lines, without having any View of the Enemy, he still believed that the Prince of *Orange*, who had neglected to carry his Line of Circumvallation to the Heights, had reserved them, in order to his Army in Array of Battle before his Line.

The Prince of *Conde* did not approach the Heights till Evening; and as desirous as he was to post his Troops there, before the Arrival of the Enemy, who had not made their Appearance, he durst not attempt that Disposition, because he had no Troops, at that time, but those who composed the Front of his Army. He was apprehensive lest the Enemy, conscious of their Error, in not extending their Lines to those Heights, and neglecting to form themselves in Order of Battle, at the proper time, should advance with a superior Force, and easily dislodge his Troops from those Eminencies, and then post themselves in that Situation, which would have rendered the Engagement more difficult and hazardous. The

The Prince of *Conde* therefore, in order to conceal from the Enemy, his Intention to fix himself on those Heights, would not permit any Officer to appear on the Eminencies which the Enemy had not possessed, and seemed to direct all his Attentions against the Quarter on the Upper *Scheld*, which was to the Left of the Circumvallation, and beyond a little Rivulet that flows into the *Scheld*. But when Night came on, and the rest of the Army had arrived, he immediately caused the Heights to be possessed by the Left Wing of the Cavalry; after which he posted some Battalions there, and in that Disposition, waited till the Day should enable him to survey the Front of the Line; which, till then, had been concealed by the Heights; in order to attack it with all the Advantages the Enemy had abandoned, by inclosing themselves within its Circumference. The Enemy who only undertook the Siege of *Oudenard*, with a Persuasion that the Prince of *Conde* was in no Condition to oppose it, and were unwilling to come to a general Engagement, were only attentive to raise the Siege in the Night. A very thick Fog, which began to cover the Earth, a little after Midnight, concealed the Retreat of the Enemy, whose Line, during the Night, was only guarded by a Rear Guard of Dragoons, who made a great Noise, that those who approached them might imagine
the

the whole Army was formed in order of Battle, along the Line. So that when the Fog began to clear up, our Troops beheld the Enemy's Rear beyond the Line of Circumvallation, on the Side of *Ghent*.

The Prince of *Condé* had an Inclination to pursue the Enemy who marched in a Column; but the Count *de Souches*, who commanded the *Imperial* Troops, made that Design ineffectual, by judiciously filing the Front of the Army into the Rear, in order to possess the Eminencies which lay behind those where the Prince of *Condé* had posted his Troops.

The Particulars that attended the raising the Siege of *Oudenard*, are not of that Importance, as to afford me any Reflections on the particular Species of Action, which is the Subject of this Chapter; but they furnish me with several Remarks of another Nature.

The first is antecedent to the Time of the Siege. We see, in that Conjunction, a young General elated with Presumption, and destitute of Experience, who because he found himself stronger than his Enemy, imagined he might, even in his View, undertake the Siege of a Place, whose Circumvallation was intersected by a River; without considering whether he could equally secure both his Quarters, when his Enemy should approach him

him from the River, or whether he should have sufficient Time to take the Place before his Enemy could be in a Condition to attack him; and even without determining whether he should wait for the Enemy in his Lines, or advance beyond them to attack him. As none of these Particulars were previously considered by the Prince of *Orange*, it is not at all surprizing, that the Prince of *Condé* should compel him to raise the Siege of *Oudenard*, with so much Dishonour; the Enemy would either have sustained an Overthrow in their Lines, had they continued in that Situation, or, at least, their Rear Guard would have been defeated, when they quitted the Lines, if the Fog had not risen, and continued longer than the Night.

My second Remark relates to the manner in which this Circumvallation was formed; and in order to discover its Defects, I have already observed that *Oudenard* is seated on the *Scheld*, and consequently it could only be invested from two Quarters, which could have no Communication with each other, any otherwise than by the Bridges. The Inhabitants had stopped the Sluices in the City, which occasioned an Inundation, that floated all the Meadows along the *Scheld*, to a considerable Distance above the Line of Circumvallation; and consequently the Enemy were destitute of a Bridge over the *Scheld*,
above

above *Oudenard*. And tho' the Prince of *Conde's* Army made their Approaches to the Place, through the Country between the *Lys*, and the *Scheld*, they were capable of throwing several Bridges over the River, above the Inundation, and might advance to the other Side, to storm the Quarter in that part, at the same time that by opening the Sluices of the City, the Bridges of Communication below the Place, would have been carried away by the sudden Flow of the Water.

In a Word, the Line was very defective, as I have already observed. It was below the Heights, and formed without any Intention to post the Army there, for an Engagement, and the Extent of Ground that lay between it and the City, was not spacious enough to admit any Army to form themselves in Order of Battle, without being either exposed to the Cannon from the Place, or to the Fire of the Army, who were drawn up on the Heights: Or, lastly, without striking all the Tents in their Camp. It is evident therefore, that the Lines of *Oudenard* could not be defended without inevitable Danger.

The second Instance of Lines being forced, in my Time, is that of the *Turkish* Lines before *Vienna*, in the Year 1683. The Grand Vizier had drawn the Lines round his Army, within a Circumference of rising
2 Ground,

Ground, that left a spacious Plain, between the Lines and the Mountain. This general had neglected to possess the Heights towards the *Danube*, when the Christian Army advanced to his Troops, because he thought them impracticable to an Army, and especially the Cavalry; and he did not quit his Line, to form the Troops in order of Battle on that Plain, and prevent the Christian Army from advancing, by the open Country, on the Upper *Danube*. Those two Errors gave the King of *Poland* an Opportunity of extending all his Cavalry along the Plain, and even on the Heights, and of attacking the Front of the Line; while the Duke of *Lorain* attacked the Right, with all the *German* Infantry, by the Head of the Upper *Danube*. In this manner were the *Turkish* Lines of Circumvallation forced, and their Army defeated, with the Loss of all their Artillery and Baggage.

This Example justifies my Maxim, not to wait for an Enemy, in Lines of Circumvallation, be they never so good; because they are always attacked where they are most exposed, and the Enemies make their main Effort in those Parts that seem most commodious to their Purpose, and where they are sensible the Defence will be least considerable. It is likewise impossible for an Army to form themselves in such Lines, and

to oppose a Front to the Enemy, who have separated the Troops of their Adversaries, by entering the Line.

The third Instance of Lines that have been forced, is that of *Turin*, in the Year 1706. As I have already mentioned this Siege, in my Observations on the Errors committed in the manner of investing that City, and shall have occasion to resume that Subject, in the sequel of this Discourse, I shall confine myself, at present, to the Battle of the Lines, and hope to make it evident, that the fatal Event of this Action, can be only ascribed to the Errors committed against the true Maxims that ought to be pursued, in this Operation of War.

When Prince *Eugene* arrived at the *Tanaro*, with his Army, he found the Duke of *Orleans* posted with his Forces, on the other Side of that River, with an intention to dispute either the Passage of the *Tanaro*, or that of the *Po*. This was the best Resolution that could be formed, but the Destiny of *France* had otherwise decided the Affair. The King had appointed the Marshal *de Marfin* to command the Army, under the Duke of *Orleans*; and as his Majesty reposed much Confidence in the Marshal, he had ordered the Duke to pay a Deference to the Sentiments of that General, when they should happen to differ from his own. The Duke's Thoughts,

in this Conjunction, being contrary to the Marshal's, that Prince assembled a Council of War, with a Persuasion, that the Plurality of Voices would confirm his Opinion, not to shut up the Army in the Lines of *Turin*, against the opposite Sentiments of the Marshal *de Marfin*. But the Cabal of *M. de la Feuillade*, who formed the Siege, joining with the Partizans of the Marshal, the Duke found his own Opinion, tho' very judicious, entirely disrelished, and the Council came to a Resolution to permit Prince *Eugene* to pass the *Tanaro*, and that the King's Army should retire within the Lines, when that Prince approached the *Po*, and we left only a small Body of Infantry, under the Command of *M. d'Albergoti*, to keep the Heights of *Moncalier* and *Chieri*.

This first Error drew on a second. The Army entered the Lines, and the Duke of *Orleans* found the Camp so ill supplied with Provisions, that there was only a Quantity of Meal sufficient to subsist this numerous Army for four Days. We were therefore immediately obliged to send away all the Provision Waggon, as far as *Susa*, which was ten Leagues from the Camp, for 1500 Sacks of Meal that were deposited in that Place, and it would be three Days, at least, before the Convoy could return to the Camp. Prince *Eugene* however did not allow them Time to compleat

compleat that Expedition, but encamped his Army in the Plain of the *Millefleurs*, the very Day the Convoy was to arrive at the Camp. The Van-Guard of this Prince discovered the Convoy, before the Troops who guarded it could have any Intelligence of the Enemy's Approach, and it was entirely surpris'd. So that if Prince *Eugene* had not forced the Quarter of *Balon*, the next Day, he might have starved the King's Army in their Camp; so negligent were we in furnishing Provisions for so numerous an Army, who were likewise shut up in their Lines, near an Enemy of inferior Force, which was a Proceeding, absolutely inconsistent with all the Rules of common Understanding.

Prince *Eugene*, after the Surprisal of this Convoy, being informed that the Quarter from the *Doria*, to the Lower *Po*, was destitute of a Line, and had but few Troops to guard it, pass'd the *Doria* with all Expedition, and encamped at the *Veneria*. If the King's Army had quitted their Lines, and left them in their Rear, and if they had been found, in Order of Battle, on the Plain of *Millefleurs*, where the Enemy had been posted, they would never have presumed to pass the *Doria*: And this was the third capital Error which was committed, on this Occasion, against the Maxim of not waiting in Lines of

Circumvallation, for the Advance of an Enemy.

We were sensible, tho' too late, that the Quarter of *Balon*, which M. *de la Feuillade* had neglected to cover with Lines, lay exposed, after the Enemy had past the *Doria*: And it would have been judicious, in, us to have immediately crost that River, with the whole Army, since it was no longer necessary for them to continue in their Lines, towards a Quarter from whence the Enemy had decamped. This salutary Motion was, however, neglected, and the Quarter which was weak in Troops, was attacked the next Morning, by all the Enemy's Forces, in three Columns of Infantry, supported by the whole Body of their Cavalry. It was so late, before we received Intelligence of their Approach, that we had not Time to pass the *Doria*, with a sufficient Number of Troops, to oppose the Enemy. The Quarter of *Balon*, therefore, was soon forced, the City was relieved, and we were obliged to raise the Siege in the utmost Confusion; with the Loss of all our Artillery, the Number of which was prodigious. It was not the Death of Marshal *de Marfin*, who was slain at the Quarter of *Balon*, or at least mortally wounded and taken Prisoner, that occasioned the Disorder, and the raising of the Siege, but the unhappy Wound of the Duke of *Orleans*, who was no longer capable of acting. This

This Example discovers the great Difficulty of composing the Disorder which is diffused through a whole Army, by forcing a single Quarter of a Circumvallation; and tho' this was separated, by the *Doria*, from the rest of the Army, who had not any Share in the Calamity at *Balon*, yet it happened to produce such Effects, as were afterwards too sensibly experienced, and which are too well known, to make it necessary for me to relate the Particulars.

It may naturally be concluded, from these three Instances of Lines being forced, that it is always dangerous for a General to wait for his Enemy, in Lines of Circumvallation, be they never so good; because the Loss is infinite, when they are forced, and he exposes his Army to the Danger of an Overthrow, and always without any Possibility of defeating the Enemy, who only make their Efforts against the Line they attack, at such a Distance, and for such a Length of Time, as they judge convenient, and who sustain no other Risque by the Action, even tho' it should happen to be unsuccessful, than the loss of some Men; because the Army, who are shut up in the Lines, are incapable of improving any Disorder, which their vigorous Resistance may occasion among the Assailants, who when they have ceased their Attack, are formed in Order of Battle before

an Army, who must quit their Barriers, in order to advance to the Foe; and which is a Motion altogether impracticable.

But that I may the more effectually enforce this Maxim, that an Army ought never to wait in Lines of Circumvallation, for the Arrival of their Enemy, but should engage them without the Lines, I shall relate a fourth Example, which is contrary to those I have already represented, and where the General succeeded in his Enterprize, by conforming to this Maxim.

When Prince *Eugene* formed the Siege of *Lisle*, he contracted the Extent of the Lines, as much as possible, and would only comprehend such a Tract of Ground, on which he could station those Troops who were appropriated to this Expedition, and without any Intention to carry his Circumvallation round the Heights adjacent to the Line; because he would not enclose his Army within those Limits, should we make our Approaches to attack them; and he determined to reserve those advantageous Heights for his Field of Battle. When the Duke of *Burgundy*, therefore, marched for the Relief of that Place, by the Upper *Marque*, and *Scelin*, he found Prince *Eugene* posted and intrenched on the Heights between *Scelin* and *Lisle*, and without his Line of Circumvallation. His Right was supported by the Morass of *Noyelle*, and his

his Left by the *Marque*; and the Village of *Frelin* lay in the Front of his Right; by which means he opposed, to our Army, a Front as much extended as that by which he could be attacked; at the same Time that he had no Reason to be apprehensive for the Flank of his Troops. Any Disposition of this Nature, would have been impracticable to an Army, who had been shut up in their Lines of Circumvallation, where it is almost impossible for their Flanks to be supported or covered, and where they may be surrounded by the Enemies, who are capable of forming all such Motions as they shall judge expedient, in order to force the Lines.

This last Example entirely justifies the Truth of my Maxim, and I shall conclude this Chapter with repeating my Observation, that an Army ought never to wait, in their Lines, for the Approach of an Enemy.

C H A P. XXXVI.

Of the Attack of a Place.

I Have already observed, that a Place should be always attacked in that Part where it is most easy to be forced, with Relation to the Facility of supporting the Attack, which may

be so considerable, as to induce a General to open the Trenches on a Quarter of greater Strength than any other.

My Reflections on this Subject, shall be drawn from those Sieges, in which the Trenches have been opened, without sufficient Reasons, in a Situation where it was most difficult to conduct an Attack. My first Instance shall be the Siege of *Charleroi*, in the Year 1693.

Monseigneur *de Vauban* had not formed the Body of the Place, but had built all the Out-Works, and, consequently, ought to have been well acquainted with that Place. He was charged with the Conduct of the Works, under M. *de Luxembourg*, and yet, tho' he was a Man of great Ability and Prudence, and very cautious of hazarding the Mens Lives, he attacked the Place, in a part strong enough to hold out longer than any other Quarter, and in a Season far advanced and very rainy. The Place was attacked in the following manner. The Trenches were opened, only on the Right of the Head of *Brussels*, without causing our Left entirely to enclose the Polygon of that Place, after which the Sap was carried on, to the Foot of a very steep Glacis, between the Canal and the Counterscarp of the Place. The second Attack was to be conducted between the *Sambre*, and the Head of the Canal; and

these two Attacks were to communicate with each other, between the Canal and the Place; after which, we were to advance, at the second Attack, beyond the Cawsey of the Canal. This sole Track of Communication between the two Attacks, could be only supported by the Fire of a Parallel, raised on the other Side of the Canal, and even that Protection would have been too remote, had the Defence been maintained with Vigour.

It was necessary therefore, before the Communication of the two Attacks, at the Foot of the *Glacis*, was attempted, to make our selves Masters of two Redoubts of Stone, one of which was raised in the Canal, on the right Flank of the Attack of the Head of *Brussels*, and the other at the Head of the Canal, on the Side of the Attack of the *Sambre*, and which defended the Cawsey of the Canal. This Passage was very narrow and difficult, so that the Troops could not easily defile, in a Place that was but six Fathoms in Breadth, from the Fire that came from a much higher Situation; and it was equally difficult to hazard a Communication, on the lower End of the Canal, because the Tract of Ground between it and the Foot of the *Glacis*, which was very steep, was too inconsiderable, to make it practicable to form any Expedients, in order to cover the Work that was to be extended from one Attack to the other. This

Work was, however, compleated without any Opposition from the Enemy, who afterwards even permitted us to make a Lodgment on the *Glacis*.

This good Fortune, should be no inducement to pursue the same Conduct, in any future Conjuncture, and is only to be ascribed to the Incapacity of the Officer who defended the Place, and to the Weakness of the Defence, which are accidental Circumstances, on which the Besiegers should never depend. And the Enemies of *M. de Vauban* have declared, that he had an Inclination to discover his Capacity, in the Conduct of the Works for this peculiar Attack. This Suspicion might possibly have some Foundation, with Respect to any Person but *M. de Vauban*, whose Merit has been always conspicuous, and to whom the Masters of great Genius, in Fortification, have been considerably obliged.

The second Instance of an injudicious Choice of a Situation for the Attack of a Place, is that of the last Siege of *Barcelona*, which the Marshal *de Tessé* raised in a dishonourable manner, upon a meer Intelligence, that the Enemy's Fleet had been seen on the Coast of *Valentia*.

M. de Lapara was charged with the Conduct of the Works; and as he was much inferior to *M. de Vauban*, his Errors can be

only imputed to his Incapacity. This Engineer proposed to attack *Barcelona*, and the Fortrefs of *Montjoui*, from one extreme Point of the Trenches ; and the Project might have been good, had the Execution of it been more judicious. *Barcelona* had been taken, from this Quarter, by the Revolters, and the Place had never been repaired from that Time: But the Attack ought not to have been conducted from *Montjoui*, against the Head of *Barcelona*, but rather against the Flank which lay open to an Insult, and was accordingly insulted by accident, when the Besiegers attempted to make a Lodgment on the Counter-scarp, on the Side of *Barcelona*. The Conduct therefore, in the Attack of the City, was very mean, tho' there might be Reasons, as I before observed, for the Choice of that Attack.

When I therefore compare the Siege of *Charleroi*, with that of *Barcelona*, I may say, with Respect to the Former, that the Attacks which were chosen, where the Place was strongest, were conducted to a fortunate Event, by a Man who was desirous, on that Occasion, to display the Greatness of his Capacity, by taking a Town, at a Quarter entirely different from that where he seemed to have had an Intention to take it, and which was at the Head of *Brussels*. But as to the Siege of *Barcelona*, M. *de Lapara*, who had
judi-

judiciously chosen his Attacks, did not conduct them with Capacity, in the Progress of that Siege, nor even to his Death.

The third Example, of the ill Choice of an Attack, is that of *Turin*. As this was the most memorable of all, and the manner of forming the Attack had been discussed several Months before the Siege was undertaken, I shall be more particular in relating this Event, than I was in my Account of the others.

There were two fine Attacks to be chosen against the City; the one, on the Side of *Valentin*, at the Gate of *St. Peter*, and the other, towards the Suburb of *Balon*, against the Gate of the Palace. The Choice between these two Attacks was proposed, and I shall now relate the Reasons that were alledged against them, and which appear to me very insufficient.

It was objected against the Attack of *St. Peter's Gate*, that in order to render it practicable, it would be necessary to begin with securing the fortified Eminence of the Capucins, which lay within the grand Intrenchment of the Heights, on the other Side of the *Po*; and I allow that Observation to be just: But must likewise affirm, that this Operation was a necessary Preliminary, as well to the investing of the Place, on the other Side of the *Po*, as to secure the Attack against the City;

City; and it would likewise have proved very commodious to the Assailants.

It was urged against the Attack of the Palace Gate, that it would be necessary to begin with conquering the Works that covered the Suburb of *Balon*, because they would otherwise have commanded the Reverse of the Trenches, till they could have been carried on, between those Works, and the Body of the Place; after which it would be still necessary to dislodge the Enemy, from the Heights on the other Side of the *Po*, or otherwise the Cannon of the City, which had been planted at the Vineyard of the Duchy, and on the adjacent Hills, would have continually plaid into the Trenches. I likewise approve of these Reasons, but can take upon me to assert, that the Siege of *Turin* ought not to have been formed, without a previous Attack of the Heights, for the Security of those two fine Attacks, because it is an undeniable Maxim, in Operations of this Nature, that the opening of the Trenches ought to be preceded by every Circumstance, proper to be effected against any Enemy, in order to render the right Choice of a Situation, for the Attack of a Place, advantageous to the Assailants.

These two Attacks, that were thus proposed, on the Upper and Lower *Po*, had no Inconvenience to be apprehended, except the
Fire

Fire of the Cannon, from the Heights on the other Side of the *Po*, and for that very Reason, the Enemy ought to have been dislodged from those Heights, after which, the Attack would only be attended with an inconsiderable Difficulty in the Front, which might be conquered, in a few Days, by the Fire of that prodigious Train of Artillery, which the King had caused to be planted against *Turin*, and with the greater Facility, as the Fortification lay open to those two Quarters.

There were two other particular Reasons, which ought to have determined the Choice of the Attack, in Favour of the Palace Gate; the one, that it fronts the Palace of the Duke and the old Town, the Houses of which are almost contiguous to the Rampart, where the Streets are very narrow, and the Buildings easy to be set on fire, which would have rendered it very difficult for the Besieged to convey Ammunition to the Rampart, and the Place of the Attack. The other, that by stopping the Flow of the Canal of *Alpignan* into the *Doria*, that Canal might have formed the Rear of the Trenches, which, at first indeed, would have been open to the Reverse of the Works that cover the Suburb of *Balon*, but, even then, would not have been flanked by the Horn-Work that was newly raised, between the Gate of *Susina* and that of the Palace. The Works, therefore, which covered

vered the Suburb of *Balon*, and were on the other Side of the *Doria*, would have been abandoned, as I before observed, when they had been separated from the Place, by the Trenches.

All these Reasons for our choosing one of those two Attacks, and especially that of the Palace Gate, in Preference to that of St. *Peter*, on account of the Facility of the Service in the Attack, because the greatest Part of the Ammunition was brought to the Camp from *Chivasso*, were ineffectual, notwithstanding their Weight, against the Fatality which betrayed us into the Loss of *Italy*, by our injudicious Choice of the Situation for the Attack of *Turin*.

It was determined, therefore, to open the Trenches, against a strong Front of the Citadel, the Bastions of which were covered with Counter Guards, the Angles of the Counterscarp fortified with Redoubts of Stone, Bomb Proof, the two *Glacis* in excellent Condition, and countermined with great Care; in a Word, against a Front prepared for a long Resistance, with all the Art and Expence necessary on such Occasions.

The Reason alledged for attacking *Turin*, by the Citadel, was that only one Siege was intended, because the Loss of this Fortress would be succeeded by that of the City; whereas if we had chosen one of the two
other

other Attacks, it must have been preceded by that of the Intrinchment, and the Hills which it inclosed, and that after this Expedition, we must take the City, and then besiege the Citadel, by which Means we should be engaged in three Sieges instead of one,

This Reason is easily refuted, and had not any Appearance of Solidity: For as the Duke of *Savoy* was shut up in *Turin*, with all the Remainder of his Infantry, and the greatest part of his Cavalry; we ought to have chosen the Situation for the Attack, in such a manner, as to have made it contribute to invest the Place so effectually, that neither the Duke, nor his Troops, should be capable of quitting *Turin*. The Destruction of this Body, would have obliged the Allies to abandon *Italy*, and would have totally ruined the Duke of *Savoy*. It was, therefore, of the utmost Importance, to block up that Prince in the City; and as the Attack of *Turin*, by one of the two Gates I have mentioned, ought to have been preceded by our Possession of the Heights, it is certain, that the Choice of those Attacks would have produced this Capital Event, for the Conclusion of the War in *Italy*.

It is a mistaken Opinion, that one of these two Attacks of the City, would have lengthened the Expedition, and have occasioned three Sieges; the Reason is this. The Troops
who

who were shut up in the Place, were very considerable in Number, it was necessary therefore to concert several Measures to destroy them, and which might have been effected, by increasing their Fatigue, and multiplying their Destruction in Detail. But we deprived our selves of the Means to accomplish this Event, by reducing the Attack of *Turin*, to one Point of Defence, which was that against the Front of our Attack of the Citadel. Besides, as the Attack on the Palace Gate, was such as I have described, how could it be imagined, that the Citadel alone would be capable of containing the Men who would be in a Condition to serve, after we had taken the City, which could not have made a long Resistance, had we attacked it by the Gate of the Palace? How could it be supposed, that part of the Troops would persist in an obstinate Resolution to be overwhelmed by main Force, in the City, when we had once forced it, while the other part were shut up in the Citadel to sustain a third Siege?

The Capitulation of the City would, in all probability, have regulated that of the Citadel, on Considerations a little more or less honourable for the Troops. But I will suppose that the City had been taken, without having made any Capitulation for the Citadel, and that, by the Obstinacy of the Garrison,

rison, and their desperate Defence, at the time when the City was obliged to capitulate, the Troops of that Garrison had been so reduced, that no more of them had been left in the Place, than what might have been contained in the Citadel for its Defence; this, in my Opinion, would have been the strongest Circumstance of Desperation that could have occurred in the Defence of *Turin*. But why should this particular Instance of Desperation, have made it necessary to besiege the Citadel in Form? I must confess the Reason is not evident to me; but on the contrary, I assert, that twenty Battalions, and five hundred Horse, would have been sufficient to guard the City, and form the Blockade of the Citadel; and that the rest of the Army, by marching from the Siege to join the precautionary Army in *Lombardy*, would have rendered it so superior to the Emperor's Forces, who had no fixed Posts remaining, on the other Side of the *Alps*, that they might easily have been compelled to repass those Mountains, and abandon *Italy*. I likewise add, that if there had been a fix'd Determination to besiege the Citadel in Form, in Opposition to the solid Reasons I have offered, our Troops ought to have attacked it from the City, and not from the Country. We may therefore impute our Misfortunes in *Italy*, to our Misconduct in the Choice of a Situation for the Attack on *Turin*.
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Tho' the Siege of *Lisle* proved so successful to our Enemies, in the Year 1708, I must equally condemn their Project, as well as their Conduct in the Choice of their Attack of that Place. The Project for this Siege might well be thought chimerical by every Man of Understanding. The City had been sufficiently fortified with all the Art M. *de Vauban* could bestow upon a Place, the Body of it was strengthened with Bastions, when the King took it, and besides the Advantage of the Citadel, his Majesty had added all the Out-Works he judged necessary. The Marshal *de Boufflers* was likewise in the Place, with a Garrison of about 15000 Men. How then could it be imagined, that the Enemy should be capable to bring before that Place, all the Ammunition and Provisions, and to convey thither all the Artillery and Materials necessary to such an Enterprize, since these immense Loads were to be brought from a Distance of 23 Leagues, by Land, and amidst an Army of above 80000 Men, who might easily have been assembled for the Interception of those prodigious Convoys, whose Line of Carriages, alone, extended five Leagues at least? All this was, however, accomplished by the Enemy, without the Loss of one Waggon, which will seem incredible to Posterity, tho' the Fact is too certain to be contested.

I have already observed, that a General may sometimes have very good Inducements to attack a Place on some particular Quarter that seems stronger than any other ; but that they can only relate to the Facility or Protection of that Attack, which would be more difficult to be carried on and sustained in another Situation, tho' the Place should happen to be weaker in that Part. The Attack on the City of *Lille*, was made by the *Magdelane* Gate, from no other Motive than the small Distance from the Causey of *Menin*, by which the Ammunition and Artillery might be conveyed in a commodious Manner, for the Service of the Trenches. The Place was not so strong, at the Gate of *Five*, and the Distance from whence the Artillery and Ammunition were to be conveyed to the Trenches, did not exceed a Quarter of a League ; the Enemy's Motive, therefore, for opening the Trenches where they did, may be justly thought insufficient.

This improper Choice of the Attack was unavoidably attended with bad Conduct in the Works: The Trenches were opened to the Right and Left of the *Deule*, and consequently the two Attacks were separated by the River, and could only maintain a Communication by Bridges, which might have occasioned great Inconveniencies, if the Besieged had been disposed to improve this Misconduct:

conduct: The Front of the Army, when they began the Works, was drawn out against a Polygon of Fortification, that comprehended above a thousand Fathoms in Extent, and this Front, contrary to all Rules of Art in the Attack of Places, was contracted in Proportion as it approached the Works; so that when the Enemy were near the Covert-Way, they were reduced to a Point, with Relation to the Extent of the Attack, and only presented themselves before the two salient Angles of the *Tenaille*; by which Means they no longer equalled the large Front, when they advanced to the *Glacis*; and consequently were never in a Condition to drive the Besieged from the Covert-Way, by Lodgments on the *Glacis*, and they accordingly made but one attempt to march the Troops to the Counterscarp, in which they were unsuccessful.

These were the principal Errors committed by the Enemy, contrary to the Rules necessary to be observed in the Attack of Places.

The Siege of *Tournay*, formed by the Enemy, in the Year 1709, seemed to be an Enterprize that would furnish me with a Variety of Reflections, because it had the Appearance of being very considerable, with Reference to the Situation, and the Structure of the Place. I have no Remarks to offer on

the Project for this Siege, which could only be concerted by the Enemy, in Presumption of their Superiority, and the Facility of conveying before the Place, whatever might be necessary to the Completion of that Enterprize; and in Consequence of their Certainty, that the Garrison of *Tournay* had not a sufficient Supply of Provisions, for such a Length of Time as the Siege might have been continued; the Enemy were likewise sensible, that this Scarcity of Provisions prevented the King from having such a considerable Body of Infantry in *Tournay*, as might have defended it so long, that the Enemy would have almost found it impossible to take the Citadel.

The Enemy having determined to besiege *Tournay*, formed the Circumvallation on the two Sides of the *Scheld*, and drew the Lines round the Forces appointed to carry on the Siege. Their precautionary Army had been posted between the Lines, and the Scarp; and Bridges had been thrown over the *Scheld*, above and below the City, to preserve a Communication between the Quarters, and to enable the precautionary Army to pass that River, upon any Emergency.

Such was the Disposition of the Enemy, in order to protect the Siege, and I shall now describe that which they formed for the Attack. They came to a Resolution to make their

their Attack on three different Quarters, separated from each other, without proposing any Communication between their Attacks, because they imagined they had a sufficient Body of Infantry to sustain them against a Garrison, which, as it was formed into three Divisions, would be incapable of making successive Efforts against one of those Attacks; but it is certain they might have been deceived in that Expectation. These three Attacks were to be carried on, before the Gates of *Marvis*, the seven Fountains, and *Valenciennes*. That Attack of *Marvis* was directed to the Horn-Work on the Left of that Gate, and extended to the Bastions of *Antoin* and *Luquet*. That of the Gate of the seven Fountains could not be extended on the Left, by reason of the Inundation, and therefore it comprehended the Horn-Work of the seven Fountains, and, without taking in that of the Gate of *Lisle*, was carried on between those two Works, towards the Bastion of *Blandinois*, which was joined to the old Body of the Place. The Attack at the Gate of *Valenciennes*, was intended to support a large Train of Artillery, with which the Enemy proposed to destroy the Sluices at that Gate. The Troops of this Attack formed a very inconsiderable Front, because their Right was contracted by the Inundation, and they durst not be too extensive on their Left, lest they

should be too near the *Glacis* of the Citadel, which was countermined.

The Disposition of these Attacks, separated the Garrison, which M. *de Surville* imagined was too weak, to make any considerable Efforts, in Succession, against an Attack, tho' that Opinion was ill founded. But I shall be more particular on this Article, when I relate the Errors that were committed in the Defence of *Tournay*; and if I acknowledge these three Attacks were well concerted to effect the Separation of the Garrison, it must likewise be granted, that the Enemy committed several Errors in their manner of conducting their Trenches towards the Works, and the Body of the Place. But as my present Reflections only relate to the Choice of the Attack, I shall think it sufficient to observe, that when the Enemy compared their Infantry with that in the Place, they judiciously resolved on several Attacks, entirely separate from each other, but their manner of conducting their Works was very unartful, and even rash, as will be evident when I treat of the Siege of *Tournay*, with Reference to the Defence of Places.

In the same Year 1709, the Enemy likewise formed the Siege of *Mons*, after the Battle of *Malplaquet*. They made their Attack on the Gates of the *Berthamont*, and *Nimy*, in order to separate the Garrison which
was

was too weak. The Attack on the Gate of *Berthamont* corresponded, in a great Measure, with that which the King of *France* formed, when he took this City in 1691, but the Place had been much improved since that Time.

As I could never obtain any Journal of this Siege, I shall only relate those Particulars I received from Persons of Experience, who were then in the Place, and with relation to the Defence alone, when I proceed to this Subject; and I shall then be obliged to repeat some Passages in this Chapter, to give a clear View of those Errors that were committed in the Defence of the Place, which should have been directed against the Attack, in Order to have rendered that Defence effectual.

C H A P. XXXVI.

Of Saps and Demi-Saps.

M. *De Vauban* was the first Engineer, who introduced the frequent Practice of a Demi-Sap, which was seldom used before, but in order to encompass the Angles, and when an Advance had been made to the middle of the *Glacis*. The Demi-Sap de-

stroy a less Number of Men, than the common Works, and the Risque is intirely sustained by the Sapper in Front, when Precautions have not been taken for his Security.

I have only seen Saps carried on with Blinds at two Sieges. They were used at the Siege of *Fribourg*, because there was a Tower on the Gate which commanded the Trench. The same Method was observed at the Siege of *Charleroi*, when the grand Attack was carried on to the Right, by the Extremity of the Canal, as I have intimated in another Place.

The Enemy, at the Siege of *Tournay*, conducted their Sap, in order to arrive at the Bastion of *Blandinois*, between the two Horn-Works of the seven Fountains, and *Lisle*, and the Head of this Sap extended to each Reverse, and was entirely blinded; but I shall not repeat any Particulars related in the Chapter of Attacks, where I mention the Errors committed by our Enemies in their Attack of that Place.

C H A P. XXXVII.

Of Batteries of Cannon and Mortars.

THE Reader will find the proper Construction of these, with the Particulars relating

relating to the Park of Artillery, in the Book written by the *Sieur de St. Remi*; and I shall only observe, that the extraordinary Fire of Cannon and Bombs, was first introduced, in my Time, in order to take a fortified Place, or at least to render the Capture more expeditious, and less destructive to the Men.

It is an undoubted Axiom, that the sooner the Body of any Place can be demolished, or its interior Works ruined, or the Garrison fatigued by the Effect of Bombs, the greater is the Expedition with which the Besiegers are Masters of that Place. In the Attack of a fortified Place, the Assailants should begin with ruining the Defences and Parapets of the Body of the Place, by the extraordinary Fire of the Cannon; this Method enables them to make their Approaches with more Safety; after which the Batteries will soon demolish the Body of the Place. The Bombs are only useful to ruin those interior Works and Batteries that are not seen, and sometimes the Magazines. If the Place attacked be large and populous, Bombs are necessary, because they destroy Houses, and continually fatigue the People, who are soon harassed with their Vigilance for the Preservation of their Lives, and Effects, without any Probability of evading the Loss they sustain by the Fire from above,

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M. *de Vauban* was the first who excelled in placing Batteries of Cannon, for different Purposes, and was even the Inventer of those that discharge the Ball with a bounding Roll. The Method is thus. The Cannon is half charged, and the Explosion of the Ball is directed along the Branch of a Covert-Way, either in a Work, or a dry Ditch, or through a Place conceal'd from the Battery. These Balls which flie with a moderate Swiftnes, and in repeated Bounds from the Earth, have always a sufficient Force to break the Legs of the Men who are at Work, or even to kill those who are obliged, by meer Fatigue, to sleep on the Ground. And as they only need to be mounted on a little Coin, to be discharged with this Effect, their Use is as effectual in the Night, as it is by Day.

Bernard van Gallen Bishop of *Munster*, was the first Prince who multiplied the Use of Mortars.

In the Year 1672, when M. *de Luxembourg* commanded the *French* Army, and that of the Elector of *Bavaria*, at the Siege of *Groll*, he was charged, by this Prince, with the Conduct of the Attack; while the Elector took care to distribute 65 Mortars round the Place, which, in the Space of four Hours, set Fire to the whole Town, and made the Inhabitants compel the Garrison to capitulate, in order to preserve themselves from the Flames. This

This Prince likewise introduced the Use of Carcasses ; and as they are not so heavy as Bombs, they are incapable of destroying Edifices, but they immediately set Fire to what has been demolished by the Bombs. In order to this Effect, the Bishop caused some to be thrown after the Bombs, and pointed to the same Place, but they are not so successful as Bombs, on account of their Lightness, which makes them liable to be turned out of their Track by the Wind when it is violent.

The late Elector of *Brandenburgh* introduced the Use of red hot Balls, with Success, at the Siege of *Stralsund*, in *Pomerania*, in the Year 1675: The Effect of them is terrible, by their Promptitude to kindle whatever combustible Matter they touch ; and when any of those Balls fall on the Roofs of Houses, they are set on Fire in a Moment.

C H A P. XXXIX.

Of Lodgments on the Glacis.

I have seen but two Sieges, where the Misconduct of those by whom they were directed, gave the Enemy an Opportunity of dispos-

268 M E M O I R S

dispossessing the Assailants, for some Time, of those Lodgments they had made on the *Glacis*, for want of pursuing the necessary Attentions mentioned in my Maxims. The two Events, which I shall now relate, are different in their Species.

The first was a Dislodgment from a common *Glacis*, which was not countermined, and on which the Lodgments and Batteries are frequently destroyed, for want of the Precautions necessary to be observed, in all Advances on a *Glacis* that is countermined.

In the Year 1691, M. de Bullonde was charged with the Siege of *Cony*, and he left the Regulation of it to M. de Lapara. This rash Engineer was resolved to carry on a Trench, to the Right of the Attack, which conducted it to the Salient Angle of the Counterscarp, exterior to the Front attacked, and which consequently was not supported by any Parallel. When Day appeared, and the Enemy had surveyed that unsustainable Work, they sallied out on the Head, and forced the Assailants to abandon it. This Work was undertaken contrary to my Opinion, for which Reason I was determined not to support it in the Day, and only prevented the Enemy from destroying it; but I ordered it to be abandoned, because its Preservation would have cost us too great a Number of Men, while the Day continued.

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HISTORICAL *and* MILITARY. 269

The injudicious Conduct that was generally pursued at the Siege of *Turin*, in 1706, betrayed our Troops into those Inconveniences, which are usually sustained, when Works are formed on a *Glacis* that is countermined, without the proper Precautions for the Security of the Men. Our Lodgments and Batteries, at this Siege, were continually blown into the Air, for want of sinking Vents to a sufficient Depth, and surrounding the Batteries, with Branches carried low enough to make it certain that we were deeper than the Enemy, who extended the Branches of their principal Mine, under the Lodgments and Batteries. It is a necessary Precaution, therefore, to discover the Branches and Chambers formed by the Enemy, if the Assailants would provide for their Security under Ground, before they hazard the Works above, the blowing up of which, by the Explosion of the Chambers, ought to be evaded as much as possible.

In 1709, the Enemy form'd the Siege of *Tournay*, and I am persuaded, that the Conduct of their Works on the *Glacis*, was owing to the weak Defence of the Besieged. They made their Approaches, without any Precaution for the Security of the Trenches, which were not protected by any Parallel, before the Horn-Work of the seven Fountains. They were equally incautious
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in their manner of inclosing the left Branch of that Work, along which they extended, in order to advance to the Bastion of *Blainois*, by a double Sap, that they might only be covered from the Fire of the Horn-Work of *Lisle*. In a Word, their whole Conduct was so irregular, that it should never be imitated; because the Besiegers, in carrying on their Works before a Place fortified with Art, ought not to act imprudently, nor deviate from the proper Rules, lest they should have cause to reproach themselves, for any Check they may sustain on a *Glacis*, in Consequence of their Inattention to the just Rules.

I have pointed out, in my Maxims, that Conduct and Attention, which ought to be pursued in the Attack of a Place, whose *Glacis* is countermined; and I might have had several Observations to make on this Subject, if the Citadel of *Tournay* had been defended; but as it happened to be otherwise, tho' the *Glacis* and Works were countermined in great Perfection, I shall reserve my Sentiments on this Article, to my Examination of the Errors committed in the Defence of that Place.

C H A P. XL.

Of the Attack of Out-Works.

I Shall, in this Chapter, consider the Attack of Out-Works, which are of two Kinds; the one exterior, and without the Covert-Way of the Place; the other separated from the Body of the Place, but within the Covert-Way, and the Counterscarp: But I shall only consider those of the first Species: There were several of these, formerly at *Arras*: The Walls of the Place were antient, and had neither Bastions, nor any considerable Flanks. The Marshal *de Schulemberg*, who was the Governor of that Town, had a numerous Garrison; but as the Court was, at that time, incapable of furnishing the Expences, necessary for the regular Fortification of that Place, the Marshal surrounded it with a great Number of Out-Works of all Kinds, agreeably to the Situation of the Ground. The Works were not faced, but only fraised, palisaded, and enclosed with Ditches. As it was not usual, at that Time, to convey a great Train of Artillery before Places that were besieged, *M. de Schulemberg* believed, with sufficient Reason,

Reason, that their Works could not easily be destroyed by the Enemy's Cannon, and that he should be in a Condition to defend them, for a considerable Time, by his strong Garrison, whose Fire would oblige the Enemy to make their Approaches to his Works, with Circumspection, and by opening Trenches; by which Means, he should greatly retard them, in their Advances to the Body of the Place, which was but indifferent. This was a judicious manner of thinking, at that time, but such a Conduct would now be subject to great Inconveniencies; because Works of that Nature, which are separated from the Place, would soon be destroyed by the Artillery, and the Bombs, to such a Degree, that the Men within the Place, could not long be in any State of Security, and these demolished Works would be converted into sure Lodgments for the Enemy, and afford commodious Situations for the Batteries.

I have seen some Out-Works at *Namur*, and *Charleroi*, which were faced. The Enemy neglected to attack them, when they made their Approaches, and only surrounded them. Those who defended them were made Prisoners of War, after they had suffered themselves to be inclosed. The rest abandoned them, when they saw the Trench near enough for them to be surrounded by it, when the Work of the ensuing Night had been

been compleat; and they prudently retired into the Place.

In the Year 1693, when *M. de Luxembourg* besieged *Charleroi*, the Redoubt which was raised in the Canal, towards its Extremity, was abandoned, when those within it saw the Trenches carried on by the Foot of the *Glacis*, and the Canal; and that the Works preparatory to the Attack on the Right, towards the *Sambre*, were sufficiently advanced on the Dike, to enable the Assailants to drain the Canal, which Circumstance would have rendered the Redoubt defenceless. The Redoubt which was built on the Dike at the Head of the Canal, was surrounded with more Expedition, than the Defendants imagined was practicable, and therefore they were obliged to surrender themselves Prisoners of War.

It appears, by the Account of these two Redoubts of *Charleroi*, that they did not prevent *M. de Vauban* from conducting his Attack to that Quarter, which had been thought impregnable till then; and that these Redoubts did not even contribute to the Protection of the Place, nor retard the taking of it, at the Quarter they seemed to defend, and by which *M. de Vauban* was determined to take it, to give an Instance of his Capacity in the Conduct of Works.

Namur was besieged, by the King of France, in 1693; and by the Prince of *Orange*,

in 1695. In the first Siege, *M. de Vauban* inclosed the Redoubt of *Balar*, and then advanced his Works against the Bastion of the Upper *Maes*, and took the Town by that Attack.

I shall relate another Instance, wherein a Redoubt, detached from the Body of the Place, was neglected by the Assailants, and only obliged them to carry the Extremity of the Trenches into a little more Extent. When the Citadel of *Namur* was besieged, *M. de Vauban* neglected to form an Attack against a detached Work, that was raised on the Declivity towards the *Sambre*, and was called the *Coborn* Fort, because it was built by that famous Engineer, who imagined it would be absolutely necessary to attack it, in order to take the Castle; and yet *M. de Vauban* made himself Master of the Citadel, without attacking the Fort; which is a farther Proof, that how well soever an Out-Work may be placed, it will not be necessary to attack it, when the Assailants are capable of defiling from it.

At the second Siege of *Namur*, in 1695, and which was conducted by Monsieur *Coborn*, that excellent Engineer was determined to make it evident, that he despised the new Works which *M. de Vauban* had raised at *Namur*, and that he would take the Place, without attacking those new Works, which *M.*

de Vauban believed were absolutely necessary to be attacked in Form. *M. de Vauban* had therefore augmented the Number of Redoubts, which covered the Front of the Town, along the Eminence, from *Balar*: And I must confess, that I did not think them well disposed, when I saw them, because I thought they did not sufficiently command the Country, to make it necessary either to form the Circumvallation, or to the open of the Trenches, at a greater Distance. Besides, those Redoubts were not properly conjoined together, and were neither faced, nor had any mutual Communication by a Covert-Way; and therefore they did not appear, to me, capable of keeping the Enemy at a Distance from the Place, for any considerable Time, which ought to be the principal Design, in the Construction of those Out-Works. The Enemy, therefore, shewed the same Disregard to those Redoubts, as *M. de Vauban* discovered for that of *Balar*.

On the Left of those Redoubts, and even of the new ones, there was a Place called the *Coclet*. The Marshal *de Boufflers*, who commanded in *Namur*, thought himself in a Condition to fortify this Post, in the Presence of the Enemy, and to fix a great Body of Infantry there in Safety. I am not able to comprehend the Use of such a rash manner of Fortification. The Enemy improved that Te-

merity, and as this Intrenchment did not command any extensive View, a considerable Body of Infantry were posted very near it, without being seen from the Intrenchment, which was afterwards attacked and carried, after a long Defence. The Besieged lost near three thousand Men, which considerably hastened the taking of the Place.

I relate this Instance of a Work that was assaulted and carried by Storm, to make it evident, that Fortifications of this Nature, are dangerous to those who would maintain them by an obstinate Defence, when they are exposed to the Insults of an Enemy, and that even their Distance from any Insult renders them of little Consequence, when they are so remote and detached from the Place, as makes it impossible to protect them by its Fire: And that they may likewise be enclosed by the Enemy, in which Case the Soldiers who defend them, are compelled to render themselves Prisoners of War, if they are too soon intimidated, by their Apprehensions of not being able to retire into the Place. I may add too, that the Expence of their Construction is superfluous, since they cannot long protract the Loss of the Place.

At the Head of the Castle of *Namur*, *M. de Vauban* had raised a large Work, called the *Cassotte*, on the Left of the Works of *Terranova* and *Coborn*, and pretended that it would

would be impossible for the Forces of an Enemy to approach the Castle, till they had first made themselves Masters of this Work, which had been raised with all imaginable Attention to the Art of Fortification, but had not any Communication with the Covert-Way of the Castle. This Work therefore was of the same Species with those that are the Subject of this Chapter.

M. *de Coborn* determined not to form any Approaches to this Work by Trenches, and did not make any Attempt against it, till he had opened a Breach, with the Cannon, in the Bastion of the Castle, towards the *Sambre*, and had ruined the Work of *Terranova*: After which he made the necessary Preparations for attacking the Body of the Castle, and resolved to carry the *Cassotte* at the same Time. The Event succeeded to his Desire, with Respect to this detached Work.

This Instance of assaulting an Out-Work, that had no Communication with the Place, and taking it in a general Attack, is of a Different Nature from that of *Coclet*: For the *Cassotte* was in a very good Condition, and had a fine Covert-Way, fortified with Palisades, before which was an excellent *Glacis*, and the Soldiers, who were stationed in this Post, were numerous. But notwithstanding all these Advantages, it was attacked and carried, because it could only be supported by

its own Forces, which were opposed by the Enemy, with so much Superiority as rendered them incapable of Resistance. As the Men, therefore, who defended the *Cassotte*, could only be sustained by the Troops, who advanced by the Covert-Way of the Castle, and were exposed to the Fire of the Enemy, who formed this Attack with a Body of Forces much more numerous than the Defendants; it is certain, that the Men, who might have attempted to pass by the Covert-Way, would have been destroyed by the violent Fire of the Enemy, before they could arrive at the *Cassotte*.

This last Example of carrying an Out-Work, that had no Communication with the Covert-Way, tho' it appeared secure from any Insult, by the manner of its Construction, sufficiently justifies my Maxim, that relates to Works of this Nature, which never ought to be obstinately defended, but when they are built in such a manner as renders it impracticable to surround them, and obliges the Enemy who attacks them, to make his Approaches with Circumspection, and only to the Head. For if *M. de Coborn* had not caused the *Cassotte* to be attacked, at the same time that he ordered the Castle to be assaulted, it is certain, that he might have carried on his Advances to it by Trenches, and could have enclosed it in such a manner, that the
Men

Men who defended it could never have retreated to the Castle, if they had waited till the Enemy had extended themselves along the Flanks of that Work, and surrounded it by that Motion.

Tho' I might properly take this Opportunity to treat of Counterscarps, and Covert-Ways, were I to pursue the Order of a Siege, I shall, however, continue my Reflections on the other Works, which are not contiguous to the Body of the Place, but within the Covert-Way, and which have some Communication with the Place. After which, I shall offer my Remarks on Counterscarps, and Covert-Ways.

I have seen several Works, of this second Species, attacked; such as Half-Moons, Horn-Works, Counterguards and Tenailles.

The Half-Moons which I saw attacked, were those of *Lisle*, when the King of *France* formed the Siege of that Place in Person, in the Year 1667. The Besiegers had only lodged themselves one Night, on the Points of the two saliant Angles of the Counterscarp, without extending themselves along the *Glacis*, to open a Communication between their Lodgments, and to drive the Enemy from that Extent of the Covert-Way, which was comprehended between the two Lodgments. The Enemy returned to the Angles, the next Morning, and dislodged our Troops, from their Estab-

blishments there. When the King therefore intended to assault the two Half-Moons, in the Front of the Attack, the following Night, the Enemies were still Masters of all their Covert-Way and Counterscarp; which is a Circumstance that ought not to be imitated, in the Attack of Works that are within a Covert-Way. This Assault, however, was entirely successful, for several Reasons. *1st*, We attacked the whole Front of the Counterscarp with such a superior Number of Infantry, that the Enemies were soon compelled to abandon the Covert-Way. *2dly*, Those Half-Moons were not covered, and the Quantity of Water, in their Ditches, was very inconsiderable, which facilitated the Passage of our Troops; and we ascended the Half-Moons by their Gorge, where we killed all the Men who were incapable of retreating by the Bridge of Communication between the *Tenaille* and the Half-Moon, where we made a secure Lodgment, while a Communication was forming between the Half-Moon and Covert-Way.

This Instance discovers the Impossibility of supporting Works that are separated from the Body of the Place, when there is Water in the Ditches, and when they have only a Communication with the Place, by narrow Bridges, over which the Besieged are incapable of returning in any considerable Front, to the Works from which they are dislodged. In

In the Year 1673, when the King formed the Siege of *Maeſtricht*, in Perſon, a Half-Moon was attacked and carried; after which it was recovered by the Enemy, and retaken by our Troops; the Beſieged, afterwards, made themſelves Maſters of it again, but were, at laſt, conſtrained to abandon it.

We were driven from this Work, becauſe the Enemy ſprung ſeveral Mines, when we began to form our Lodgment, and they blew up a great Number of our Pioneers, and Soldiers, and threw the reſt into great Diſorder. By which Means, when the Enemy immediately re-advanced to the Half-Moon, under the Fire, from the Body of the Place, and the neighbouring Works, we were obliged to yield to their ſuperior Numbers, and the regular Order with which the Beſieged returned to the Attack. But as the Earth that was thrown up, by the Exploſion of the Mines, had formed a great Heap, it conſequently facilitated the Lodgment of our Troops, when they renewed the Attack, and covered them from the Fire of the Place and the Works, in ſuch a manner, that if the Enemy had made another Attempt to recover that Poſt, they would have been unſucceſſful in the Action.

The Beſieged may, for once, recover a Work they had loſt, 1^{ſt}, If the Beſiegers advance to the Attack, from too great

a Distance, and the Materials for making the Lodgment, are conveyed in a Track that lies open to the Enemy, which causes a great Loss of Men, and delays the Completion of the Lodgment. *2dly*, If they likewise are not Masters of the Covert-Way, and have not sufficiently extended their Lodgments on the *Glacis*, to be capable either of supporting, by their Fire, those who are charged with the Attack of the Work, or of incommoding the Enemy, should they be obliged to form themselves, without being covered, to re-advance in good Order to the Work they had lost: Or, *3dly*, If the Work be undermined, and most of the Assailants have been destroyed, by the springing of those Mines. But when the Troops that form the Attack, will allow themselves Time to conduct it with Judgment and Precaution, and are not disconcerted with their own Impatience, it will be impossible for the Besieged to readvance to a Work they have lost, because it will then have been sufficiently opened, and enclosed, and the considerable Lodgments that have been formed near each other, by the Assailants, will infallibly secure their Possession of the Work, and render it impossible for the Besieged to return to that Work, if there be any Water in the Ditches.

In the Year 1676, I was charged with an Attack on the Horn-Work of *Bouchain* towards

wards the lower Town, and which had been unsuccessful the two preceding Nights. We had posted our selves, by a Parallel, on the middle of the *Glacis*, but had not made any Lodgment on the Covert-Way, of which, however, there were only the two Angles of the Right and Left of the Attack, that were possessed by the Enemy, who had abandoned the Counterscarp, in the Front of the Attack. When we relieved the Regiment who had miscarried in their Attack of the Work, I observed, on the Flanks of the Attack, that the Bottom of the Ditch, before the Horn-Work, was muddy in some Places, and seemed to be sandy in others. This Discovery inclined me to think, that if I should attack this Work, by Day, I might happen to succeed with the greater Facility, because I could order some Detachments of the Troops to descend into the Ditch, where I imagined the Bottom was firm and good. I accordingly obtained this Permission, from the Marshal *de Crequi*, and accommodated my Dispositions to the Ground I had surveyed; after which I caused the Work to be attacked in five different Quarters, where I judged the Bottom of the Ditch to be good: The Event answered my Expectation; the Soldiers marched over the sandy Part; the Work was carried, and my Lodgment made on the two Demi-Bastions of the Horn-Work, in less than

than two Hours; and in such a manner, that it was impossible for the Besieged to make any Attempt to recover it, because there was a Body of Water in the Ditch before the Place, and this Work, which covered the City Gate, fronted the Draw-Bridge, which could not be let down, without exposing the Troops, who should endeavour to pass it, to the Fire from the Lodgments.

I should not have offered any Instance of an Action, wherein I was personally concerned, but with an Intention to prove, that in the Generality of the Operations undertaken in War, a fortunate Event is chiefly owing to a full Conception of the Nature of the Enterprize, or to the good Disposition in which it is attempted. For if I had not considered the Difference of Soil, on the bottom of the Ditch, and caused the Work to be attacked by Day-Light, that I might not be deceived in the Parts of the Ditch, over which I imagined the Troops might pass with the most Facility; in a Word, if I had waited for the Darkness of the Night, with an Intention to render the Action less hazardous, I might have been as easily defeated in my Design, as those who preceded me, and who had a greater Number drowned in the Ditch, than I lost in my Attack at Noon-Day.

I shall

HISTORICAL and MILITARY. 285

I shall but barely mention the repeated Attacks of the Counterscarps of *Turin*, in 1706, because they were all unsuccessful; and indeed the whole Conduct, during that Siege, was so extremely despicable, that every Particular may be justly censured.

I shall not enlarge on that Uncircumspection with which the Enemy carried on their Approaches, at the Siege of *Tournay*, and made themselves Masters of the Horn-Work of the seven Fountains. I am sensible that the Weakness of the Defence occasioned the Temerity of the Attack, and therefore, I shall not make any farther Remarks on that Subject.

I shall close this Chapter with a few Observations that may pass for certain Maxims; Namely, *that an Attack should never be formed against a Work, unless the Assailants are very near it; (to prevent the Loss of Men, in a March that exposes them to the Enemy) and that the Work should be previously shattered, in such a manner, as may render it more assailable. That the Nature of the Attack ought to be perfectly understood, and the Disposition formed with Judgment: In a Word, that all the necessary Precautions in the Conveyance of the Materials for the Lodgment, should be effectually taken, in order to render the Success infallible and expeditious.*

C H A P. XLI.

Of the Attacks of Counterscarps and Covert-Ways.

I Am not very copious in my Maxims on this Subject, because I am entirely averse to the antient Practice of attacking Counterscarps by Storm, as being an Operation very destructive to the Assailants. The manner of forcing the Besieged to abandon their Counterscarp, and Covert-Way, practised by *M. de Vauban*, is certainly best, and most effectual, at the same time that it is least fatal to the Men. I shall only relate three Instances of storming Counterscarps, in order to make it evident, that this old Practice ought to be rejected.

The first is, that of the Counterscarp of *Maestricht*, when the King of *France* form'd the Siege of this Place, in the Year 1673. This Counterscarp was protected by several Out-Works, and the Body of the Place, from whence the Fire was very violent; because the Defences had not been sufficiently demolished by our Cannon and Bombs.

The Opposition, however, could not be great, on the Front of the Attack, because
there

there were not any great Palisades within the Covert-Way, the Banquets of which being rais'd higher than those of the first Palisade, would, by a well directed Fire, support the Men who sustained the first Palisade, but who would be incapable of continuing long behind it, and in the Covert-Way, where they would be exposed to the Vollies of the Assailants, who were stationed on the *Glacis*. Our greatest Loss, therefore, was occasioned by the Fire from the Out-Works, and the Body of the Place, as well as from the Explosion of the Mines, under the Angles, on which we endeavoured to make a Lodgment; and likewise in Consequence of our being exposed to the Enemy, while we advanced from too great a Distance, to attack a Counterscarp that was protected in the manner I have described. Tho' this Enterprize, therefore, proved successful, it ought never to be imitated, for the Reasons I have mentioned before.

In the Year 1689, when the Duke of *Lorraine*, who commanded the *Imperial* Army, formed the Siege of *Mentz*, which was defended by the Marquis *d'Uxelles*, who was afterwards created a Marshal of *France*; that Prince determined to storm the Counterscarp, after his Artillery had ruined the Body of the Place.

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This Counterscarp had been improved into a better State of Defence, than that of *Maestricht*. There was a double Palisade in the Covert-Way, and well disposed to produce a good Effect. And therefore, tho' the Duke of *Lorain* caused it to be attacked by all his Infantry, in several Columns, and the Arms of the Men in the first Rank were Musket Proof, yet the Fire, from the two Palisades, was so well directed, during the Attack, which continued for the greatest part of the Day, and was very violent, that it was impossible for the Enemy to dislodge the Besieged, from the Counterscarp, till towards the Close of the Attack; at which Time, M. *d'Uxelles*, who had not any more Powder in the Place, to enable him to sustain a second Attack, suffered the Enemies to make a Lodgment on an Angle, that he might have some Pretext for a Capitulation; without which the Enemy might have suspected, that he was inclined to surrender, for want of Powder.

This Instance discovers the Advantage that attends the Assailants, when their Works enclose the Front of the Attack, and when, by their Lodgments on the *Glacis*, they are in a Condition to make the Besieged abandon their Counterscarp, and Covert-Way, through the Impossibility of their being protected from the Enemy's Fire. But as the Men
who

who are posted behind the second Palisade, may by their Fire, for which the Enemies are unprepared, give those who are behind the first Palisade, time to recharge their Pieces; this Operation by Storm, is very destructive to the Assailants.

Our Enemies pursued a different Conduct, in the Sieges of *Namur*, in 1695; and of *Menin*, in 1706. They drew before those Places, a prodigious Quantity of heavy Artillery, which they planted in Batteries, that they might be enabled, at the same Time, to destroy the whole Front of the Attack, under the Protection of that Fire. It was easy for them to advance their Trenches, and ruin the Out-Works, and even the Bodies of those two Places, in a few Days; which they accordingly did, in such a manner as to make the Governors apprehensive that the Places would be assaulted by all the Enemy's Infantry, when they should attack the Covert-Way.

This is an excellent Method, when the Place intended to be attacked, happens not to be too razant, and when the Enemies have reason to believe they command a sufficient part of the Stone-Work, to make its Ruins facilitate the Attack, and their Passage over the Ditch. But I entirely disapprove of this Proceeding, when the Fortifications are very razant, and only to be commanded from the

Glacis, but not so effectually, as to enable the Enemies to make their Batteries in Breach, and entirely to demolish the Front of the Attack.

When the Enemy besieged *Lisle*, in 1708, they only made one Attempt to storm the Counterscarp, but were so discouraged by the Loss of most of the Men, who were detached for that Service, that they no longer persisted in that Method of Attack. This Loss was occasioned by the bad Conduct of our Enemies, who were crowded on the *Glacis*, instead of being extended, in order to comprehend the Front of the Attack.

I shall finish my Reflections, on this Subject of this Chapter, with observing, that if the Assailants propose to make themselves Masters of the Counterscarp of a Place they besiege, they ought to pursue the Method by which *M. de Vauban* conducted himself, when he was Master of the Works; since it is certainly the safest, and proves least destructive to the Men, because they are not exposed by it, to the Fire from the Works of the Place, which ought to protect the Covert-Way, nor to that of the second Palisade, if it should happen to be erected.

C H A P. XLII.

Of the Passage over Ditches.

AS the Sieges at which I have ever been present, have not afforded me an Opportunity of seeing any Governour, who obstinately defended the Bottom of his Ditch, when it happened to be dry, I shall therefore confine my Reflections to those Particulars, of which I have been a Spectator.

It will be necessary for those who may hereafter be engaged in Sieges, to take notice whether the Bastions of the Place are form'd with *Orillons*, and the Curtin rebated, agreeable to M. de *Vauban's* last manner of fortifying Places; in order to observe in what manner they are employed by the Governor, in defending of the Passage of his Ditch.

If the Place be razant, and the Bastion, in Consequence of that Disposition, has not been entirely ruined by the Enemy's distant Cannon, I should imagine the Governour might derive Advantage from the Cannon of the *Orillon*, and the small Shot of the Rebatement, if he be in a Condition to preserve both the one and the other, from the Effect of the Bombs; but this Advantage cannot be

obtained, unless he be capable to form *Traverses*, at the Bottom of the Ditch, to support their Fire by that of the Cannon of the *Orillon*, and the small Shot of the Rebatement: For it is not to be imagined, that the concealed Cannon will be able to destroy the Gallery, that may happen to be formed at the Bottom of the Ditch, to set on the Miner; because if a Ditch, which is protected by its *Orillon*, must be past, only to set on the Miner, the Aperture may either be opened for him by Cannon Shot, when a Battery has been planted on the Covert-Way, or he may be conducted to the Bastion, by a Gallery formed between two Ridges of Earth, and may charge the Mine in the Night. If the Ditch be well replenished with Water, and can only be filled by heavy Materials, I am of Opinion, that it may be defended by the Cannon of the *Orillon*, and the small Shot of the Rebatement; the Effect of the Balls will disconcert the Materials, when they rise above the Water, and the small Shot will destroy the Men who cast those Materials into the Ditch.

It is, likewise, not to be supposed, that the Cannon of the *Orillon* will prevent the *Assailants* from passing the Ditch, in order to attack the Breach, after the Mine has had its Effect. For if we allow the Cannon Shot to be as effectual as possible, it cannot destroy
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HISTORICAL *and* MILITARY. 293

more than twenty Men, which will not be a Loss considerable enough to defeat the Success of an Assault; and the Cannon of the *Orillon* cannot be recharged soon enough, to cause such a Destruction among the Assaultants, as will oblige them to discontinue their intended Storm.

My real Opinion is, that when the Defence proves obstinate, and that, notwithstanding the good Effect of the Mine, the Besieged believe the Breach is in a Condition to sustain an Assault, the Lodgments on the Ruins will be difficult to be formed, under the Fire from the *Orillon*, and the small Shot from the Rebatement; and I am inclined to think, that the most effectual Method of obliging the Place to capitulate, is to set on fresh Miners, to the Right and Left of the Breach, to open the whole Face of the Bastion.

C H A P. XLIII.

THE Custom of waiting for the Effect of Mines, in the Body of a Place, has not been observed by those Governors who sustained a Siege, since I engaged in the Service; because the Besiegers did not find it necessary to set on the Miners at the Body of a Place, to compel it to surrender. The Faceings of

Bastions are always so demolished by the Cannon, and their Inside is shattered, to such a Degree, by the Bombs, that it is impossible for an Attack to be sustained there, when it has been carried on near enough to be made against the Bastions, and especially, since it is usual, in the most obstinate Sieges, for the Lodgments along the Covert-Way, and before the Breaches, to be always so extensive and solid, that it would be imprudent in a Governour, to expose his Garrison to a Destruction that might be compleated in half an Hour, and particularly, when his Bastion had not been previously intrenched in the Gorge.

I have not even seen a faced Out-Work, that has waited for the Effect of a Mine; and as the *Fourneaus* and *Foucades* are more frequently used by the Besieged, than the *Affailants*, I shall be more copious on this Subject, in my Reflections on the Defence of Places.

I refer those who are desirous of other Particulars, on this Article, to *St. Remy's Memoirs for the Artillery*, in which he has described every Species of Mines, *Fourneaus*, and *Foucades*.

C H A P. XLIV.

Of Breaches.

MOST of the Breaches I have seen, either in the Works, or the Bodies of Places, have been effected by Cannon Shot; for which Reason I shall only observe, that the Method of making Breaches, by Cannon, is less destructive to the Men, than that by Mines, because all Lodgments in a dry Ditch, to support the Mines, are ineffectual, and if the Ditch be full of Water, the Ruins caused by the Effect of the Cannon, contribute to fill it.

I have only seen Traverses at the Bottom of a dry Ditch, at the Siege of *Charleroi*, and which were evidently formed to support the Foot of the Breach. This Intrenchment was cast into an Angle, flanked by the Bastion, in which the Breach had been opened; and therefore, if the Defence had been more obstinate, it would have been necessary for the Assailants to have extended themselves along the Covert-Way, in order to have mounted to the Assault, and to have inclosed the Salient Angle of the Counterscarp, before the Point of the Bastion, to dislodge the Men who were posted behind the Traverse.

C H A P. XLV.

Of inward Intrenchments.

I Have seen some Sieges, wherein the Governors began with entrenching the Gorges of the Bastions that were attacked, but as they capitulated, before the Enemy were capable of advancing to the Breaches they had made; and as these Intrenchments were not compleated, I cannot be positive whether they were really intended to be used or not.

When *William King of England* besieged *Namur*, in 1695, the *Marshal de Boufflers*, who commanded in that Place, and had a very strong Garrison, was desirous to form a great Intrenchment interior to the Attack from the Upper *Maes*, but if he had been in a Condition to bring it to Perfection, it would have been always ill disposed, and could not have lengthened the Defence of the City, for the following Reasons, which I shall enlarge upon, in order to make it evident, that this kind of Out-Work, formed during a Siege, is frequently more prejudicial to the Place, than subservient to its Defence; unless it be judiciously disposed, and fully compleated

pleated, at the Time when it may be necessary to use it.

This interior Intrenchment was visible from the Heights on this Side of the *Maes*, and consequently was known by the Enemy, who continually attacked it with their Cannon and Bombs, while the Workmen were carrying it on, and destroyed a great Number of Men, for whose Preservation the Besieged ought to have been more cautious. Their first considerable Instance of Misconduct, therefore, in Deviation from my two Maxims for this kind of Work, was their discovering it to the Enemy, and making it practicable for them to assault it from other Quarters besides the Bastion; for it is certain, that one of the greatest Advantages of interior Intrenchments, for the Defence of a Place, consists in its being disposed in such a manner as renders it invisible to the Enemy, till they have taken the Bastion, and presents them with a new Obstacle, when they imagined themselves Masters of the Place.

The second Error, in the Disposition of this Intrenchment, consisted in the following Particular. The Wall of the Town, along the Upper *Maes*, not being terrassed, the Besieged never considered, that the Enemy were in a Condition to open the Place, along the *Maes*, by Batteries on the Side of the River, towards the Castle; and which they
 accor-

accordingly accomplished, some Hours before they attacked the Out-Works, and the Body of the Place; and when they assaulted the whole Front, they likewise extended themselves along the *Maes*, and entred the Town through the Breach in the Wall. This Intrenchment was taken in Flank and Rear, and all the Troops posted there, were cut to Pieces. It was therefore very injudicious to turn this Intrenchment in such a manner as left the Flanks defenceless; and an Engineer can never say, with any Appearance of Reason, that he did not foresee the Enemy would demolish a Wall that incloses a Place, since they might know it was not terrassed, nor in any Condition to resist the Efforts of the Cannon.

The third Error committed by the Besieged, in the Construction of this Intrenchment, was their exposing their Men, in such a manner, as occasioned them to be constantly destroyed, by the Cannon and Bombs, from the Heights, as I have already observed.

The fourth, was their forming this Intrenchment too near the Bastions, in Consequence of which, it was incapable of acquiring, during the Time of its Construction, such a due Elevation as might enable them to fire from an Eminence higher than the Body of the Place, when the Enemy had taken it; and they

they had not given it a sufficient Solidity to resist, even for one Day, the heavy Artillery, which the Enemy had planted on the Body of the Place.

They were likewise guilty of a fifth Error, in forming this Intrenchment in a Meadow, in which the Inhabitants used to whiten Linnen. This Situation rendered it too remote from the Ends of the Streets, and tho' it had even been sustainable by the Forces within it, it could not have any Communication with the Town, but what would lie exposed to the Enemy.

In a Word, this Intrenchment, in whatever View we consider it, could not contribute, in any Degree, to the Defence of the Place.

I am persuaded, that, in order to have defended *Namur*, its interior Part might have been intrenched, in such a manner, as would have enabled it to hold out, after the Enemy had made themselves Masters of the exterior Fortifications. In the first Place, the Buildings should have been entirely disregarded. They might likewise have intrenched the Streets, and Houses that were contiguous to the Meadow, where the Intrenchment I have mentioned, was formed. This Work might have been concealed from the Enemy, till they had established themselves in the Body of the Place, and it would then have obliged them to ascend it, and plant a Battery capable of demolishing the
first

first Buildings, without any certain Knowledge of their Success; because they would have been incapable of seeing the first Intrenchment. They would, afterwards, have been compelled to open Trenches, in order to advance, in Form, to these Intrenchments, with whose Extent and manner of Construction they would have been so much unacquainted, that they would have found it difficult to defile. The Meadow, in which the Trenches must have been carried on, was very near the Water. So that, in order to secure them from the Cannon of the Castle, which would have plaid into them, it would have been necessary to have a Supply of Materials, from a great Distance, to raise a Parapet along the Trenches, of a sufficient Thickness to resist the Cannon. The Besiegers might even have thrown up other Intrenchments, in the Streets of the City, and caused them to approach the *Sambre* and the Castle. These Intrenchments might have been easily sustained, because when they retired from one to another, they could have fired the Part they abandoned, which, for several Days, would have prevented the Enemy from continuing their Approaches, especially as they would have been obliged to advance Cannon, to ruin those new Intrenchments they would have discovered, in proportion to their nearer Approaches. In a Word, they might, in this manner,

manner, have defended *Namur*, from within the City, to the *Maes*,ⁿ which would have supplied them with a good Ditch.

If it should be objected, that had the City been obstinately defended, from within, the Enemy might have formed a Resolution to destroy the Buildings, and fire them with Bombs and red hot Balls. I reply, that this Conflagration, would, in Reality, have dislodged the Besieged from the Trenches; but it is likewise certain, that the Enemy would have lost abundance of Time, and consumed vast Quantities of Ammunition, and that their Possession of the City, would not have facilitated their Siege of the Castle, and that the Fire would, for some Days, have prevented the Enemy from entering the flaming Buildings. As the only Intention, therefore, of this Intrenchment, was to prolong the Siege, it must be acknowledged, that as *Namur* is traversed by the *Maes*, and as the Castle is separated from the City, by the *Sambre*, it was a Place very capable of an interior Defence, by so numerous a Garrison, as was then stationed there.

In the Year 1697, when the Marshal *de Catinat* formed the Siege of *Aeth*, the Governour of that Place had begun to intrench the Bastion, on the Left of the Attack, but in order to the Completion of that Intrenchment, the Defence ought to have been much longer than it proved. With

With Relation, therefore, to Intrenchments at the Gorge of Bastions, I think they are always attempted at an unseasonable Time, when the Siege has been already formed, and that they are of no Importance to its Defence, till their Completion, at least for some considerable Time, before the Siege; because if they are attempted when the Siege has been formed, the Men are destroyed, in great Numbers, by the Bombs that are thrown into the Bastion attacked by the Enemy, or, at least, the Garrison is extremely fatigued by this ineffectual Work, because it cannot be brought to any Perfection, in due Time, and consequently will never lengthen the Defence of the Place.

Those interior Intrenchments, which may be formed at the Gorge of Half-Moons, or in Horn and Crown-Works, are very serviceable in the Defence of a Place, especially when the Ditches are dry, and the Place can have a Communication with those Intrenchments, because it will be impossible for the Assailants to take these Works at the Gorge.

When Intrenchments of this Nature are faced, and have the additional Advantage of a Ditch, tho' never so narrow, they are only to be taken, either by planting Cannon on the Work, or by an exact Adjustment of the Bombs, whose Flame and Explosion will greatly incommode the Men who are intrenched

trenched on the Work ; or else by opening a Sap, carefully blinded, in order to cover the Affailants from the Fire of the Curtain, and the Faces of the Bastions ; and a Sap of this Nature, will conduct the Miner to the Intrenchment.

There was a Half-Moon in the Crown-Work of *Philipsburg*, towards the *Rhine* ; but the Besiegers were not obliged to take it, because they found Expedients to drain the Ditch, when they became Masters of the Crown-Work ; and the Efflux of Water being on the Side of the Grand Attack, the Governour demanded a Capitulation, not that he could be distressed, for some Days, by this Evacuation of the Ditch ; but as he could not expect any Succours, he was unwilling to sustain the Hazard of seeing his Garrison made Prisoners of War.

There was a Stone Intrenchment, at the Gorge of an Half-Moon at *Aeth* ; and when the Affailants had made themselves Masters of that Half-Moon, they opened a Sap ; but the Place surrendered, before its Completion, because there was a considerable Breach in the Bastion.

C H A P. XLVI.

Of Assaults.

Since I first engaged in the Service, I have seen but three Governours who sustained Assaults, in the Bodies of their Places.

The first was the *Basha* of *Neubausel*, in 1683. This Place had neither any Covert-Way, or Out-Work; and therefore, when a considerable Breach had been made in the Bastion, the Place was easily carried by Assault; because the Body of Foot, who formed the Attack, marched through the Breach, in more Ranks than could be formed by those who sustained it.

'Tis a certain Maxim in War, that when two Bodies of Troops, who are equally good, come to an Engagement, that Body which is formed into most Ranks and Lines, must defeat the other which has less, because the Efforts of the former will be more vigorous; and should the first Rank of that Body which has the fewest, destroy all the first Rank of their Enemies, it is certain, that they will be killed by the second Rank. What I have now advanced will be found very practicable, when the Action is decided by firing; and there
will

will be as little difficult, when the Attack is made by Sword in Hand, because two Men must infallibly destroy one.

The second Governour, whose Place was carried by an Assault, was the *Basha* of *Buda*. The Access to the Breach, was much more difficult than the last I mentioned. The Body of the Place had several little Works and Flanks, without Bastions, but their Fire could not be destroyed by the Artillery of the Christians, and it likewise protected the great Breach; but another was opened, at the second Attack, by the Elector of *Bavaria*. These two Breaches were assaulted, at the same time, by all the Christian Infantry, and carried after a long Defence, and the Death of the *Basha*, who was killed at the Breach attacked by the Duke of *Lorrain*.

This great Obstinacy, in defending Places to the last Extremity, is only practised by the *Turks*, who are expressly prohibited, by their Law, from surrendering to the Christians, by Capitulation, any Place where they have had a *Mosque*. But since the Time of these two Sieges, there have been several Instances, wherein they have dispensed with this Article of their Law.

The third Governour, who sustained an Assault, was Marshal *Boufflers*, in the Castle of *Namur*. The Enemy marched, at the same Time, to the Castle, and Fort *Terra-*

nova, as I have formerly observed; but the Body of Infantry advanced, without being covered, and from too remote a Quarter, to entertain any reasonable Expectation of Success; and they accordingly miscarried, tho' they were protected by a prodigious Fire from the Cannon and Bombs, till they arrived at the Foot of the Breach, and even thro' the Fire of the several Vollies, from the Roofs of the Houses, and other Parts of the City. The most intrepid among them, could only ascend half Way to the Breach, and were obliged to retreat, after they had sustained a considerable Loss, and without being able to set a Foot in the Breach.

This Example makes it evident, that it is almost impossible to carry the Body of a Place by Assault, when the Breach happens to be protected by such a Fire, as the Enemies are unable to destroy, as well as by other Fires, than what are opposed in Front; or even when the Troops appointed for this Assault, march without being covered, and from too distant a Quarter.

As I have already treated of the Assaults of Out-Works, I shall not make any other Remarks, at present, upon that Subject, but intend to finish my Reflections upon Assaults, by observing, that since *M. de Vauban* has improved the Art of attacking Places, to Perfection, by a Method of making the Trenches
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comprehend the whole Front of the Attack, and by destroying all the Defences, by a great Train of Artillery judiciously planted, and even all the interior Part of the Works, and the Body of the Places, by the Effect of the Bombs; it is impossible for a Governour to support one Work, by another; and when the Assailants have carefully destroyed all the Works that were capable of protecting those which are attacked, it would be too presumptuous, in a Governour, to sustain the Assault of a Breach, that can have no Defence, but that of the Intrenchment it self.

C H A P. XLVII.

Of Capitulations.

TH^{O'} this Subject may only seem to relate to Capitulations made for Places, my Reflections will, however, extend to all kinds of Capitulations that I have seen.

The secret Orders which a Governour may have received, from his Prince, before the Siege of a Place has been formed, not to expose his Garrison to the Hazard of being made Prisoners of War. will surely excuse him, for capitulating, before the Place is in

a Condition to be forced, or obliged to submit to those Terms which the Assailants may think fit to impose.

But in order to give a judicious Explication of this Direction from the Prince, I must observe, that if the Governour would render his Conduct capable of Vindication, he ought to make a just and good Defence, till the fatal Moment when he finds himself compelled to capitulate. But, on the contrary, if he has not defended the Place, with all imaginable Vigour and Attention, till he causes the *Chamade* to be beat; in a Word, if the Defence has been ill conducted, from the first forming of the Siege; he will be inexcusable to his Prince, since he will then have been deficient in his Duty; and the Capitulation, instead of being protracted by his Valour, or Capacity, will be forced upon him, from the Enemy's just Resolution to finish an Enterprize, within a few Days after its Commencement, and not to waste their Time, and Men, as well as their Money and Ammunition.

In the Year 1667, the King of *France* formed several Sieges in *Flanders*. The *Spanish* Places were ill furnished with Troops, and other Essentials to their Defence, and accordingly held out but a short Time. The King, however, permitted the Garrisons to retire, with Marks of Honour, and without his entertaining any Apprehensions of finding them

them in some other Place, because he would not suffer the Rapidity of his Conquests to be interrupted, by any obstinate Defence.

In the Year 1672, his Majesty pursued a very different Conduct, in the Sieges he formed in *Holland*. Those Places had strong Garrisons, and were sufficiently provided with Ammunition, but their Fortifications were not faced; the Governours were not Persons of Capacity; and the numerous Inhabitants would not expose themselves to any Military Severities, by a resolute Defence. The King, therefore, improved the Consternation of the People, and the Incapacity of their Governours, and made all the Garrisons Prisoners of War, that he might effectually deprive the *Dutch* of their Army. In which Design, his Majesty succeeded so effectually, that I have seen 8000 Men made Prisoners of War, in several Places.

I have given a general Account of the Sieges that were formed, in the Course of those two Campaigns, in order to point out the different Conduct that was pursued, with Reference to Capitulations.

In those that were made in the Year 1667, we every where found the Garrisons weak, and were sensible that the Places were equally in a bad State of Defence. We received no Prejudice, by granting honourable Conditions to the Governours, in their Capitulations:

Our Intention was to make our selves Masters of several Places, and we therefore granted those Terms which the Garrisons desired; and that we might not be delayed in the Progress of our Arms, we only obliged them to stipulate, not to march those Garrisons into any other Place we intended to attack. His Majesty, by this Conduct, took several Places, from the *Spaniards*, in that Campaign, without having any Reason to fear, that the Garrison would be found in any other Place, when he had retired from the Siege.

If the King had pursued the same Conduct, in the Year 1672, he would have found so large a Body of Infantry in the Places he attacked, that it would have been inconsistent with Prudence to have formed those Sieges, because the Infantry, which must have been left in the conquered Places, would have diminished the Troops of our Army, proportionably to their Penetrations into the Country.

I have enlarged on the different Conduct that was observed, in the Capitulations of these two Campaigns, to make it evident, that in order to regulate the Proportions made by a Governour, who sustains a Siege, the Assailants should consider, as well the general Condition, as the particular State of the Army, and the Place besieged,

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In order to give a Detail of those Sieges, wherein the Defensive has been so ill conducted, as made it necessary for Princes to punish the Governours, who meanly surrendered those Places that were confided to their Care, and that I may likewise relate those Sieges, wherein the Defence was judiciously sustained, I shall begin with that of *Naerden*, in the Year 1673, which was besieged by the Prince of *Orange*, and defended by M. *du Pas*.

M. *de Luxembourg*, who commanded in his Majesty's Conquests from the *Dutch*, marched into the Place, some Hours before it was invested, and quitted it, after he had concerted with M. *Du Pas*, the proper Measures for its Relief, when the Cavalry should be drawn together. This Governour, who was seized with a Panic, the moment he saw the Place surrounded by the Enemy, thought fit to surrender it, before they had even made themselves Masters of the Covert-way, and he signed a Capitulation, contrary to the Sentiments of the principal Officers of the Garrison. The King ordered M. *de Luxembourg* to assemble a Council of War, who were to take Cognizance of that Affair, and M. *du Pas* was cashier'd, in Presence of the Troops, who were drawn up on that Occasion, and he was likewise condemned to perpetual Imprisonment. The Council of War did not

pronounce Sentence of Death against him, because there was not any Law which condemned a Coward to lose his Life. My Reflections, on this Subject, will occur at the close of the present Chapter.

The Defence of *Grave*, by M. de Chamilli, was long, and extremely brave. The Fortifications of this Place are not faced, but it had an excellent Garrison, and a vast Quantity of Ammunition, and Provisions. M. de Chamilli made a judicious Improvement of all the Advantages he found in the Place, and if he had not received repeated Orders, from the King, to surrender it, before the Winter Season, the Enemy would not have compelled him to capitulate, till the ensuing Spring, and they would have been obliged to turn the Siege into a Blockade, during the Winter. But the King was influenced by other Views, and having no Inclination to possess *Grave* any longer, he preferred the Return of that Garrison, before the Winter Season, to the Attentions that would be necessary, the following Spring, either to recruit the Place with Provisions, or to oblige the Enemy to grant an honourable Capitulation to M. de Chamilli, whose Capacity, and vigorous Defence, had created him so much Esteem, among the Besiegers, that the Prince of Orange granted him all the Articles he proposed, with very honourable Concessions
for

HISTORICAL *and* MILITARY. 313

for his own Person, besides those which were stipulated for the Garrison and Inhabitants.

It appears, by this Example, that in Military Operations, the Conqueror is delighted to honour the good Conduct and Bravery of his defeated Enemy; not only by the secret Approbation of his own Heart, which induces him to respect a gallant Behaviour, even in a Foe; but because his Ambition is agreeably flattered, by the Conquest of an Enemy, who always rendered himself formidable by his good Conduct.

In the Year 1676, *Philipsburg* was besieged by the late Duke of *Lorrain*, and defended by *M. du Fay*. The Place was not relieved, for the Reasons I have mentioned elsewhere: The Siege was very long, and the Defence always judicious; but the Garrison, towards the End of the Siege, were not sufficiently provided with Arms, and they chiefly wanted Fuses, and Flints for their Locks: *M. du Fay*, therefore, was obliged to capitulate, but his judicious Defence induced the Duke of *Lorrain* to grant him all the Articles he proposed, and likewise those that were very honourable to his own Person, and which he intended, as so many Instances of his Esteem, for the Valour and good Conduct of that brave Governour, and he accordingly rendered that Justice to his personal Merit, which is due to a gallant Enemy.

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In the Year 1689, the Duke of *Lorraine* besieged *Ments*, which was defended by the Marquis *d'Uxelles*, who was afterwards created a Marshal of *France*; and he conducted himself so judiciously, and with such distinguished Bravery, in the Defence of his *Glacis* and Counterscarp, tho' the Body of the Place was in a wretched Condition, and he had not a sufficient Quantity of Powder, to sustain a second Attack on the Counterscarp; that his excellent Defence, to the very Moment he demanded a Capitulation, induced the Duke of *Lorraine* to conceive so much Esteem for his Character, that he granted the Governour, and his Garrison, a Capitulation altogether as honourable as they desired; and this Instance is an additional Proof of the Respect a Conqueror entertains, for the Bravery of a defeated Foe.

In the same Year 1689, the City of *Bonn* was besieged by the Elector of *Brandenburg*, in Conjunction with the Duke of *Lorraine*, and most of the *Imperial* Forces, after the taking of *Mentz*. The Baron *d'Asfeld* commanded in the Place, whose Garrison was very strong, and would have been well accommodated, if the Siege, in Form, had not been preceded by a general Bombardment, which, by the Devastation it occasioned among the Buildings, destroyed the greatest part of the Provisions necessary to a Defence. And yet the Resistance

rance was so obstinate and vigorous, and the interior Ground of the Place, the Body of which was entirely useless, was so judiciously preserved, for a considerable Time, tho' the Enemy had carried all the Out-Works, whose Loss was very fatal to the Garrison (who were not properly disposed for the Defence that Day, and the Confusion was so great, that M. *d'Asfield* received a mortal Wound, while he was giving Orders on the Rampart) and the whole Conduct of the Besieged, till that unfortunate Day, appeared so masterly to the Enemy, that when a Capitulation was demanded, the Princes who commanded in the Attack, granted very honourable Conditions; by which they rendered Justice to the Governour and his Garrison, for the Merit of their previous Defence; for the Garrison had not any Posts in the exterior Works, and were entirely shut up in the Place, which was in such a bad State, that it might have been opened, without any Opposition, by the Miner, in a very few Days, and then the Garrison would have been stormed.

In the Year 1695, M. *de Mousal* was charged with the Siege of *Dixmude*, which will furnish me with two considerable Remarks; one, on the bad Defence made by the Governour, the other, on the Capitulation, which produced such an Incident as furnished *William King of England*,
with

316 M E M O I R S

with a Pretext for receding from his Promise, at the Siege of *Namur*, by detaining M. *Boufflers*.

Dixmude was not regularly fortified, with Respect to the Body of the Place, tho' it was provided with Ramparts; but it had a Covert-Way, and five compleat Battalions. When the Trenches had been opened, three Days, the Governour surrendered the Place, and by the Terms of the Capitulation, the Troops were to be made Prisoners of War. When this Garrison had surrendered, King *William* caused the Governour to be tried by a Court Marshal, who condemned him to lose his Head; and I shall make it evident, in the Sequel of my Remarks on Capitulations, that this was an equitable Sentence, tho' Severities of this Nature, have not been established in *France*. The Garrison, as I have already intimated, were to be made Prisoners of War. The King of *England* pretended, that, by virtue of the Cartel for Prisoners of War, this Garrison ought to have been delivered up; and our Refusal gave this Prince a Pretext for not adhering to the Capitulation of *Namur*, and for detaining Marshal *Boufflers*.

The Proceeding of this Monarch was unjustifiable; for the Cartels which are usually agreed upon, by the Powers at War, and which estimate all Ransoms, from the General,

neral, to a private Soldier, extends only to the mutual Surrender of the Prisoners that have been taken on particular Occasions, and on Parties of War. Those who are taken in Places, by Capitulation, or defeated in a Battle (unless it be otherwise stipulated) may be kept to the End of the Campaign, without any Infraction of the Cartel. For what Advantage would result, from taking a powerful Garrison, in a Place, or a great Number of Prisoners, after a Battle, if the Cartel made it necessary to restore those Prisoners, before the Close of the Campaign? Custom has always decided the Fact against this Pretension.

One Reason, in particular, which justified the Detention of this Garrison, was, that the Articles were not clear and explicit, which is a considerable Omission, in the Person who proposes the Terms of Capitulation. It is likewise customary for him who grants it, to expound the Articles in the most favourable Sense for himself, when they are capable of different Explications; and in such a manner, that his Exposition may not be deemed any Deviation from his Word, by the opposite Power. If a Governour, for Instance, should demand, that his Garrison be safely conducted to some other Place, without specifying that their March shall be performed by the shortest Ways, or through
any

any particular Places, or by any determined Number of Leagues each Day; the Conqueror may, without any Violation of the Cartel, conduct the Garrison in the manner he thinks proper, provided he conveys them, at last, to the Place stipulated by the Capitulation. And there are several Examples to justify this seeming Unpunctuality.

In the same Year 1695, I was detached, with a Body of Horse, to invest *Deinse*, in which Place two Battalions were posted. Tho' the Place was not fortified with Bastions, yet it was secure from an Insult, and had a good Covert-Way. I intimidated the Governour, to such a Degree, that he surrendered himself, and his two Battalions, Prisoners of War, without so much as once seeing either our Horse or Foot; but I was so explicit, in my Article for detaining the two Battalions, till the End of the Campaign, that King *William* never complained that the Capitulation was violated, by the Detention of that Garrison; but he ordered the Governour to be tried, by a Court Martial, who degraded him from his Commission.

The Reason of this Diversity of Judgment of the Court Martial, who tried these two Governours, was, that *Dixmude* was provided with Cannon, but *Deinse* had not any; and the Governour of this last Place alledged, that he did not surrender, till after the Arrival of our Infantry.

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HISTORICAL *and* MILITARY. 319

In the Year 1703, the Duke of *Burgundy* besieged, and took old *Brisac*. The Emperor was dissatisfied with the Conduct of the Governour, and ordered him to be tried by a Court Martial, who condemned him to lose his Head. The Count *de Marfilli*, who was likewise in the Place, was cashier'd by the same Court.

The Conduct of these two Officers, might be culpable in some Instances, and I only relate this Example, to make it evident, that other Princes are more rigorous, than our Government, in punishing such Persons, whose Misconduct occasions the Loss of those Places they were to defend. The Government of a Place, or any other military Dignity, should never be granted by a Prince, but in Recompence of some Services he has received, or, in Consequence of his Persuasion, that the Persons he intends to promote, merit that Advancement, more than any of their Competitors. If a Prince, therefore, who cannot be a Spectator of every Circumstance, should be imposed upon, either with respect to the Valour or Capacity of those he promotes, the Persons, by whom he is thus deceived, ought to be accounted Robbers, who unjustly force that Recompence, from one who deserved it better than the other who received it. Why then should not such a Robber be punished with Death,
when

when he has been so injurious to the essential Qualities of a Soldier, which are Valour and Capacity, in an Employment of Consequence, to which he has the Insolence to form Pretensions, when he is sensible that he shall be guilty of Misconduct, in the Station confided to his Care? Can a Case of this Nature, be of less Importance to a State, than the Infliction of Death on a poor Soldier, who has stolen a few Herbs, for his Subsistence, contrary to the Orders by which his March was to be regulated?

I might, here, offer some Reflections, on two infamous Capitulations made by great Bodies of Troops, in the Field, if I had not mentioned them upon another Occasion. The first was in the Year 1677. The Duke of *Saxe-Eysenac*, who commanded a Body of 10000 Troops of the Circles and Contingents of the Empire, having imprudently suffered himself to be shut up, in an Island on the *Rhine*, between *Strasburg*, and *Fort Kbel*, was obliged to capitulate with the Marshal *de Crequi*, who stipulated to grant him a Pass-Port, for his Retreat into *Germany*, with his Army, by the shortest Way, and attended by a Trumpet from our General, for their better Security, which was a Pass-port altogether unprecedented.

The second dishonourable Capitulation, and which never had a Parallel in the *French* Nation,

Nation, and, I hope, never will, was that which was made in 1704, at the Close of the Battle of *Hochstet*, by the Major General, with several Brigadiers and Colonels, in the Village of *Bleinheim*, where all those Officers surrendered themselves Prisoners of War, with 27 Battalions of the King's best Infantry, and 12 Squadrons of the finest Regiments of Dragoons. This pusillanimous Action should not be transmitted to Posterity, unless we could, at the same time, acquaint them with the Infliction of some exemplary Severities on the Delinquents: And this Remark shall close the Article of Capitulations.

C H A P. XLVIII.

Of the Defence of Places that are Attacked.

THIS vast Subject affords a Variety of Reflections, which I shall digest into the Order I have observed, in my Chapter of Maxims on this Article.

I have divided it into three Branches; the first of which contains general Rules for the Conduct of a Governour, who foresees he shall sustain a Siege, and they relate to all the Attentions he ought to pursue, previous to

that Siege, and with Reference both to the exterior, and interior Circumstances of the Place; they likewise comprehend the manner in which he ought to make its Construction subservient to its Defence, and the exact Knowledge he ought to gain of whatever is contained in the Place. The second Branch includes the Dispositions a Governour ought to make, as well for the Service of the Troops, in the Defence of the Place, and the Advantages he may derive from the Inhabitants; as also for the daily Consumption of the Ammunition, and Provisions. The third Branch is called *an Advertisement*, which I offer to Governours, for the Regulation of their Conduct, in such a manner as may render it irreproachable.

But as my Knowledge, with Reference to the Subject of this Chapter, can only extend to those Places that our Enemies have attacked, I shall therefore confine my Reflections to the Conduct of the Governours, by whom those Places were defended.

I must, in Justice, applaud the Conduct of M. *de Calvo*, Governour of *Maestricht*, when it was besieged by the Prince of *Orange*. This Governour was a Man of great personal Bravery, but having never served in the Infantry, was not versed in the manner of forming the Attack, and Defence of Places. He therefore assembled the principal Officers of
his

his Garrison; acquainted them with his Inexperience in the Particulars relating to this Operation of War; desiring them, at the same time, to agree, among themselves, on the proper Expedients for the Defence of the Place, and to give him the Result of their Deliberations, that he might order them to be executed; he likewise conjured them to concur, with Zeal, for his Majesty's Service, because his only Ambition was to preserve the Place, and that he never would surrender it, by Capitulation, to the Enemies of his Prince. The Disposition of this Gentleman appears to me so amiable, and, at the same time, so remote from the usual Presumption of Commanders, that I thought it my Duty to place it in an honourable Point of View, and to recommend it as an Example, worthy to be imitated, even by Goverours of the greatest Abilities.

It seems to me, that Marshal *Boufflers* was not perfectly acquainted with *Namur*, when he was besieged, in that City, by King *William*, in the Year 1695: And I cannot find, that either Count *Guiscard* the Governour, or Monsieur *de Megring*, the chief Engineer, had any true Knowledge of that Place. When the Enemy had invested *Namur*, Marshal *Boufflers* thought to keep a Body of 3000 Men, in a place called the *Coclet*, where this Body had only one Intrenchment, and that

of little Consequence, thrown up before them ; besides which, their Remoteness from the Place, with which they had not a proper Communication, left them entirely unprotected, even by Redoubts, or any Out-Work whatever. This Plan for the Defensive, justly appeared rash to the Enemy, who stormed this wretched Intrenchment, with such a great Body of Troops, that it was soon carried, with the Loss of most of our Men who were posted there.

A Governour may observe, by this first Instance, that he never ought to post a Body of Troops in any Situation without a Place, where they may be obnoxious to an Insult, and that he even should not station them in an Out-Work, secure from Insults, but without any Communication with the Place, for any longer time than they are capable of continuing there, without any Apprehensions of being slain, or made Prisoners, in their Retreat to the Body of the Place, or of being surrounded by the Enemy's Works ; because the Men should never be exposed to unnecessary Dangers, since their Loss, which is always visible to the Troops who compose the Garrison, lessens the Confidence they ought to repose in the Conduct and Capacity of the Governour, and makes them justly apprehensive, that they shall likewise be exposed, in their Turns, to the same Fate, by the Temerity

merity or Injudiciouſneſs of the Governour. If this Poſt of *Coclet* had been remote from any Quarter where the Place was inveſted, or if it had been protected by Redoubts, or ſituated at a Diſtance from the Attack of the City, any of theſe Circumſtances would have rendered it a proper Situation for ſuch a Poſt, provided it could have been protected and ſtrengthened, in ſuch a manner as would have made it neceſſary for the Enemy to have carried on their Approaches, in Form, becauſe it would then have lengthened the Defence of the Place. But it happened not to have any of theſe Properties, and conſequently Maſhal *Boufflers* committed a capital Error in his Defence of *Namur*, when he thus expoſed ſo conſiderable a Body of Troops, in the Poſt of *Coclet*.

The ſecond Error, with Relation to the general Defence, was our not foreſeeing, that as the City Wall, on the Bank of the Upper *Maes*, was not terraced, it might be opened, and demolished, in a few Hours, by the Cannon which we ſaw the Enemy forming into a Battery, on the other Side of the River, and oppoſite to that Wall: And we were equally negligent in not terracing that Wall, or, at leaſt, in not cauſing a good Ditch within, to be made by the Workmen, who were ineffectually employed in throwing up the great Intrenchment I have already mentioned,

This Omission had a fatal Effect, in the Defence of *Namur*; for when the Enemy stormed the Counterscarp, and even the Body of the Place, through the whole Front of the *Polygon* that was attacked, they likewise extended along the *Maes*, whose Waters were then low, and entred the City, without any Opposition, by that demolished Wall.

This second Instance may inform Governors, that they ought to be continually attentive to every Circumstance capable of contributing to their Defence, in Consequence of some Expedients formed, unknown to the Enemy, for the Security of the Quarters they defend; and without being so presumptuous as to believe they can oppose an Enterprize, which the Enemy may attempt with a great Superiority; since they can only sustain it with the Men appropriated to the Defence in Front, and who will always be overwhelmed by the Numbers of the Assailants: And therefore, they ought to make a judicious and vigilant Provision for the Flanks of those Attacks, and should sustain them, by the Fire from those Works which the Enemy could not surround, or demolish with their Cannon, or which were concealed from their Observation.

The third considerable Error, in the Defence of *Namur*, was committed on the very Day

Day when the general Attack was made on the Castle. We did not foresee, that the Enemy might post a great Body of Infantry, in the Granaries of the City, along the *Sambre*, and fronting the Castle, and that their secret Fire would be infinitely ruinous to our Infantry, who were stationed below the Castle, and among the Works that covered the Balance Gate, and protected the Flanks of the *Terranova* Work, towards the *Sambre*, and the Foot of the Breach in the Bastion of the Castle. This Want of Precaution, entirely exposed our Infantry to the Fire of the Enemies, who were lodged on the Roofs of the Houses, and poured their Vollies into the Intrenchments; whereas a good Blind would have sufficiently covered that Body of our Infantry, from those Hostilities. Had this obvious Attention occurred to our Thoughts, the Enemy, in all Probability, could not have made their Approaches to the *Terranova* Work, and the Foot of the Breach, without considerable Loss. We likewise forgot to raise palisaded Redoubts, to secure the Height of the intrenched Camp, which had never been compleated. The Fire, from those Redoubts, would have prevented the Enemy from advancing in good Order, to the *Cassette*, and from insulting the Counterscarp, in a general Attack; because they would have been indispensibly obliged to attack those Re-

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doubts,

doubts, before they could advance to the Counterscarp, on Account of the Fire they would have sustained in Flank, and which would have incommoded them exceedingly, when they had made the Dispositions for their General Attack under those Fires.

This last Instance, is sufficient to prove, that *Namur* was not defended with those Abilities that are requisite in a Governour, in order to frustrate his Enemy, in an Enterprize of such Importance, as the Siege of *Namur*, which was a Place of a vast Extent, strengthened by a very numerous Garrison, and plentifully accommodated with Provisions of every kind, for a long Defence.

I shall now represent the Errors committed in the Defence of *Lisle*, in 1708, with Relation to the Subject of this first Branch.

Marshal *Boufflers*, Governour General of *French Flanders*, and of *Lisle* in particular, defended this Place against the Armies of the Allies who besieged it. The Place was strengthened with a Garrison of near 16000 Men; and yet the Enemy only attacked it, on the Side of *Magdalene Gate*, before a Front of Fortification that comprehended near a thousand Fathoms in Extent, and even this Attack was separated by the *Deule*; and consequently the Enemy approached the same Front by two Attacks, intersected by the River, which afforded them the only Communication

munication they had with each other. This Conduct of the Enemy, might have induced the Besieged to think it very practicable to make Sallies, under the Protection of the Works, either on one Side of the Attack, or the other, by which means, they might have destroyed the Works of several Days; and yet they only made one Sally, with above 500 Men, which did not produce any considerable Effect.

The Enemy, in the Conduct of their Works, committed a greater Error, and of which the Besieged neglected to take the Advantage. The Error was this. Their Comprehension of this great Front ceased in Proportion, as they approached the Place; so that when they advanced to the *Glacis*, their grand Front was so contracted, that it only equalled the Extent of the two Salient Angles, before the *Tenaille* of the Counterscarp; by which Means the Front of the Attacks was more extensive than that of the Assailants. As the Enemy, therefore, were under no Necessity of forming such a Disposition, but committed this essential Error, in Consequence of meer Incapacity in the Conduct of Works, it seemed reasonable to chastise them for their Proceeding; and yet we wanted Resolution to attempt it, tho' we easily might have opened our *Glacis*, under the Protection of the Counterscarp, and those Works that
were

were not comprehended, and we might have made such Lodgments on the *Glacis*, as would have constantly enabled us to gaul the Flanks of their contracted Front of the Attack. This Advantage was so much in our Favour, that the Enemy made but one Attempt to storm the Counterscarp, at the two Saliant Angles, before the *Tenaille*, where they only appeared, with five or six hundred Men; because they could not march a greater Number in the small Front they had formed. Most of these Men were killed, in their Advance upon the Palisade; and this single Experiment should have convinced us, that our capital Operation, for the Defence of the Place, was to make such Lodgments on the *Glacis*, as I have mentioned, in order to multiply the Fires against the Attack, and to take those who approached, in Flank, and to greater Advantage, than in the Covert-Way, which was not comprehended within the Enemy's Works.

Tho' the Want of Powder frequently silenced the Enemy's Cannon, and consequently suspended the Fire of the Bombs; yet I never heard that the Besieged improved that favourable Opportunity, in any Reparation of the Breaches, during the Night, or clearing away the Ruins, in the Day, tho' the Inhabitants of *Lisle* were numerous, and loyal, and might have been employed in this
Work,

Work, while the Enemy's Artillery ceased to shatter the Breaches. The Guard even of the attackt Work was kept with so little Vigilance, that only one Centinel was awake, and the Post was surpris'd, while all the Soldiers were asleep, after the Desertion of that treacherous Centinel; so that the Work was carried, without the least Opposition on our Part. It would have been a very easy Affair, however, to have doubled the Centinels, in every place, where the Negligence or Infidelity of one, expos'd them to the Enemy.

But the most surpris'ing Circumstance of all is, that Marshal *Boufflers* capitulated for the City, almost as soon as that Half Moon was lost, and without waiting ten or twelve Hours, to see the Enemy fill up the Ditch, that would have employ'd them, at least, for that Time, on Account of its Breadth, depth of Water, and quantity of soft Soil on its Bottom: For of what particular Importance could it be to Marshal *Boufflers*, whether the rest of the Provisions and Ammunition were consumed in defending the City sometime longer, or in a new Defence of the Citadel? It was, however, a very essential Point, to prolong the Defence of the City, as much as possible; since the Surrender of it to the Enemy, would afford excellent Accommodations to an Army, who greatly needed them, in that advanced Season, when the Rains are so frequent in
Flanders,

Flanders, that if they had happened, during the Siege of the City, they would certainly have rendered that great Enterprize unsuccessful.

I shall now proceed to the second Branch, which comprehends the Dispositions for the Defence of a Place, and which are Circumstances of the greatest Importance, since a Place can never be judiciously defended, unless the previous Dispositions have been well concerted.

The only just Dispositions which I have seen, were made by the Marquis *d'Uxelles*, for the Defence of *Mentz*; I may add too, that his whole Conduct was very regular, during the Continuance of the Siege.

Those that were made by the Baron *d'Asfeld*, for the Defence of *Bonn*, were wisely concerted, with Reference to the Preservation of the Ammunition, and Provisions, during a general Bombardment: But he was not so exact, in the Orders for the Service of the Troops, and the Precautions for the Out-Guards; as was evident, when he sustained a general Attack. This Misfortune may indeed be imputed to the mortal Wound he received, which rendered him incapable of retrieving the first Disorder occasioned by that general Attack.

The Dispositions, for the Defence of *Namur*, seem to have been defective, in several Instances.

Instances. The Troops that composed the strong Garrison, were too much fatigued, for they were divided into two Bodies, from the first Day of the Siege; so that one half of them, who were not upon Guard, at the outward Attack of the Place, were as much harraßed as the other, because they were disposed along the Ramparts, and likewise employed in the Works; by which means the whole Garrison was continually fatigued, without any regular Intervals of Rest, to render them capable of sustaining the Inconveniencies of a long Siege.

I am sensible it may be alledged, that the Inhabitants of *Namur* were generally disaffected, and that it would have been difficult to make them serviceable in the Defence of that Place. This I acknowledge to be true, but then they ought to have been compelled to the Service, and a People so numerous as themselves, might have been employed in the manner I have mentioned before.

The Dispositions for the Defence of *Lisle*, were still more inconsiderate; and I shall relate the Particulars, wherein they deviated from the Rules I have offered on this Subject.

The Siege, from the Beginning, was rendered too fatiguing to the Garrison, which was divided into two Bodies, alternately upon Duty,

Duty, for the Space of 24 Hours. This Time was much too long, as I have proved in my Memoirs. Half of the Troops were posted in the Out-Works, and the rest were stationed on the Ramparts, and employed in the Works; so that the Garrison had never any stated Hours of Rest, which are so absolutely necessary, for the Officers as well as the Soldiers, both for the Preservation of their Health, and to render them capable of defending the Place, for a greater Length of Time. The Inhabitants of *Lisle* were numerous, and well affected; and yet they were not employed in any Service either for the Relief of the Garrison, or the Preservation of the Place.

It was reported, that Marshal *Boufflers* wanted Provisions, towards the Close of the Siege, and could not supply the Citadel with a sufficient Quantity for the Garrison. This indeed is true, but the Fault must be imputed to the Disorder and Want of Oeconomy, in the Distribution of the Provisions, which was always equal; so that no Care was taken to lessen the Allotments, in Proportion to the Loss of Men. A Company that had been greatly weakened, in the Progress of the Siege, was allowed the same Subsistence, as it received when it was much stronger: So that at the latter end of the Siege, the Provisions were distributed in almost

almost double the Quantity that was necessary; and this Irregularity, alone, would have occasioned the Loss of the Place, had it been accommodated never so well.

As the Loss of *Tournay*, in 1709, completed the Series of our Misfortunes, I shall enlarge on the Conduct of *M. de Surville*, who was appointed, by the King, to defend the Place; and I shall chiefly make two Particulars evident. The one, that the Inattention of *M. de Chamillard*, Secretary at War, was the Enemy's chief Inducement to form the Siege; for they were sensible that the Place was very destitute of the Provisions necessary to its Defence. The other, that *M. de Serville* deviated, through the whole Course of his Conduct, from the Rules I have offered for regulating the proper Dispositions for a Defence.

In order to be methodical, in the Particulars of the Siege of *Tournay*, I shall first observe, that tho' the Severity of the Winter Season, had been very destructive to the Corn, yet the Minister might easily have erected Magazins, for the Provisions, in those Places that were liable to sustain a Siege, and likewise for the Subsistence of an Army, if he had contracted with the Commissary, at the usual Time, and when the Corn was at a low Price, in the Kingdom; this Precaution, however, was omitted by *M. de Chamillard*.

Tournay,

Tournay, therefore, or, at least, the King's Magazins, had such an inconsiderable Supply of Provisions, that there was not a sufficient Quantity for the Garrison, when they were shut up in the Citadel, so that they were compelled to surrender, for want of Bread. This was the first Instance of M. *de Chamillard's* Misconduct, and very capital it proved.

He equally neglected the Supplies of salt Provisions, Drink, Medicaments, and other Accommodations necessary for a long Siege, which was the second Instance of his Misconduct.

The third was his Omission to remit Money, as well for the stated Pay of the Garrison, as for the extraordinary Works during the Siege.

Tho' I impute all these Mismanagements to M. *de Chamillard*, because they might have been prevented by a due Circumspection; and he enjoyed his Post, at the Time when the Provisions for Places of Defence ought to have been made; yet I must needs acknowledge, that this Minister was discharged from his Employment, so long before *Tournay* was invested, that the intervening Time was more than sufficient for supplying that Place, with all the Provisions necessary to a long Defence, and likewise for reinforcing the Garrison; for which Reason, the new Secretary

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at War, is not to be excused, on this Occasion.

Marſhal *de Villars* has likewise been cenſured, for drawing five Battalions from *Tournay*, a few Days before it was inveſted by the Enemy; but he is not to be blamed, in this Particular. For ſince *M. de Surville* was remiſs in the Defence of the City, and as he ſurrendered the Citadel, for want of Proviſions; thoſe five Battalions, by increaſing the daily Conſumption, would have only haſtened the Surrender of the Place.

My next Inquiry ſhall be, Whether *M. de Surville* conducted himſelf with Judgment and Capacity, and in purſuance of the Rules I have preſcribed, for the Method of forming a good Defence. I have already obſerved, that a Governour's firſt attention ſhould be to gain a Knowledge of the Place, both within, and without: And that he ſhould likewise be vigilant, in making the neceſſary Diſpoſitions for a Defence, with Reference to the Service of the Troops, and the Advantages he may derive from the Inhabitants; as alſo with Regard to the Ammunition and Proviſions, and all other Accommodations that are to be found in the Place, beſides thoſe that are depoſited in the King's Magazines. Let us examine therefore, whether *M. de Surville* diſcharged theſe ſeveral Duties, and acted in the manner that becomes an

able Governour, who is resolved to defend the Place which his Prince has confided to his Care.

To render this Inquiry the more regular, I must observe, that *M. de Surville* was never sensible of the Effects that might have been obtained, from raising and collecting the Waters, by the Sluices. If he had been well acquainted with the adjacent Country; and when the Place was first invested, or sooner, (had it then been necessary to have collected the Waters) if he had lowered the rising Banks of the Dike that forms the Road to *Valenciennes*; and had raised the Sluices of the Gate of *Valenciennes*, it is certain, that the Inundation would have floated all that Road, and consequently the Enemy could not have formed their Attack on that Quarter: Or if he had even cut several large Openings on that Road, the same Waters would have swelled at the Bastion of *Luguet*, and that of *Antoign*; by which Means he would not only have rendered the Attack, on the Gate of *Valenciennes*, impracticable, but might possibly have compelled the Enemy to carry on their Attack on *Marvis*, in no other manner, than by advancing to the Horn-Work, on the Left of that Gate, with Relation to the Place.

M. de Surville, therefore, who thought his Garrison too weak, with 12 Battalions,

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and 400 Dragoons, should have endeavoured to gain a better Knowledge of the Waters, because he then might have rendered it impossible for the Enemy to have formed three Attacks, so remote from each other, as they proved; by which Means, the Division he made of his Garrison, into four Bodies, from the first Day of the Siege, and which extremely fatigued the Soldiers, would have been reduced in such a manner, as would have allowed his Troops that repose, which is absolutely necessary after a long Fatigue.

I am not sufficiently acquainted with the Level of the Waters of *Tournay*, to know exactly whether their Elevation would not have produced Torrents, in the Ditches of the Place, on the other Side of the *Scheld*, nor whether the Inundation might not have been carried over all the intervening Extent of Ground. Had this been practicable, the Enemy could only have attacked *Tournay*, on that Side of the *Scheld*; by which good Effect, the Defence of the Place would have been much contracted, and facilitated, by the mutual Communication of the Troops, who were distributed to sustain the several Attacks. I have one Reason to believe this great Effect was obtainable from the Waters, since I am assured that the Enemy, who determined to have their Armies stronger than ours, and were unwilling to weaken

them, by the Necessity of placing numerous Garrisons, in the Places they conquered, have, at present, deluged the Country, for the space of ten Leagues round *Tournay*; and in such a manner, that the Houses in *St. Amand*, and *Marchiennes*, on the Scarp, are floated with Water, and that even *Condé*, on the *Scheld*, and the *Hayne*, is greatly incommoded with the Inundation; which sufficiently evinces the advantageous Use that might have been made of the Waters of the *Scheld*, in the Defence of *Tournay*.

If it should be objected, that such a Disposition of the Waters, would have destroyed their good Effects, in other Instances, I can only reply, that this Consideration ought to have been disregarded, by *M. de Surville*, who had his Majesty's Orders to defend the Place, as long as possible.

And in order to make it evident, that *M. de Surville* was as much unacquainted with the interior parts of the Place, as he was with the adjacent Country, I shall now point out the Errors he committed, for want of that Knowledge a Governour ought to have of every Particular within a Place, that relates to the Inhabitants, and which may be useful to the Garrison, when there are not any Magazins.

It is certain, that his Majesty had not a sufficient Stock of Provisions in *Tournay*, to
subsist

subfist the Garrison, during fo long a Siege, as that might have been rendered, by the Goodness of the Fortifications: It would, therefore, have been prudent, in *M. de Surville*, to have known, exactly, what Quantity of Corn, belonging to the Inhabitants, was then in the City; and if he could not have obtained that Information, by gentle Means, he ought to have acquired it by Compulfion, and even before the Siege had been formed. To this Effect, he needed only to have armed the Garrison, and difpofed them in the open Places and cross Streets, and even to have turned the Cannon and Mortars againft the City. When he had made this Difpofition, he fhould have ordered fome Perfons of Integrity, to take a general Survey of all the Corn, in private Dwellings, and religious Houfes.

When this Enquiry had been compleated, it would have enabled him to proportion the Subfiftence of the Garrison, for the Space of four Months, at leaft; and he would not have been reduced to the Neceffity of furrendring the beft Citadel that belonged to his Majefty, for want of Provfions for the Garrison, who were there fhut up, after the Capitulation of the City: For all the Corn fhould have been immediately lodged in the Citadel, when it was ground into Flour, by the City Mills, during the Siege: *M. de Sur-*

ville, instead of taking this Precaution, for the Subsistence of his Garrison, was only attentive to support them, from Day to Day, during the Time that preceded the Siege, and in such a manner as seemed no otherwise than a charitable Contribution of the Inhabitants. He even neglected to have the Corn conveyed into the Citadel, till the 20th of *July*, when the City was preparing to capitulate; at which time, the People, who saw themselves on the Point of changing their Sovereign, refused to furnish such a Quantity as would be sufficient to subsist the Garrison, who were then retiring to the Citadel; and the Severity of the Siege they sustained in that Fortrefs, could not be more efficacious, with the Inhabitants of the City, than the Desolation of their own Houses, and the Ruin of their Families.

It appears, by the Journal of the Siege, that *M. de Surville* did not begin to raise the Supplies of Corn, for the Citadel, till the 20th of *July*, at which Time, there was an Insurrection of the Inhabitants, and a Cooper, who cried aloud, *They intend to starve us*, endeavoured to stab *M. de Surville* with a Bayonet.

If *M. de Surville*, therefore, had gained an exact Account of the Corn belonging to private Persons, before the Siege, he might have proportioned it to each Individual, according

according to his apparent Necessity, and, at the same Time, have given to the Persons from whom he took it, an Acknowledgment, in Writing, of the Quantities he received from them, in order to repay them, either in Kind, or in Money, when the Siege should be over. This should be the Proceeding of a Governour in case of Emergency, and in every Conjunction of such Importance to his Prince.

I shall not enumerate the other Omissions, with respect to Oats, Hay, Straw, Food, and Liquors; but shall only observe, that as *M. de Surville* was so neglectful in the Article of Bread, it cannot be thought surprizing, that he should be remiss in procuring those Accommodations that were not absolutely necessary. I shall only add, as a remarkable Instance of Unacquaintedness with what was contained in the Place, that Straw was taken from Beds, to make Coverings, from the Weather, for the Guards who were not relieved in the Covert-Way, or the Works; when, at the same Time, the Jesuits had large Granaries of Straw, tho' in Reality, they belonged to *M. de Megriny*, the Governour of the Citadel, who had promised to return those Fathers the same Quantity, after the Siege, however its Event might prove. They were induced, by this Promise, to conceal the Straw, and it was ne-

ver employed for the King's Service. I may add too, that on the very Day when the Garrison evacuated *Toornay*, the Enemy found Quantities of Corn, and other Provisions, in the City; which is a full Proof of M. *de Surville's* Inattention to be informed of the Accommodations contained in the Place.

If it should be alledged in his Favour, that he was apprehensive that so exact a Search would have occasioned an Insurrection, I must needs think it a very indifferent Excuse. For if M. *de Surville*, when he first entered the Place, had taken the necessary Precautions for a good Defence, he would have had no Cause to be apprehensive of the Inhabitants, because the Garrison was very strong at that time, and the King's Army had then a Communication with the Place. He was, therefore, guilty of a fatal Neglect, in not making himself presently acquainted with the interior Circumstances of the City, and the Parts adjacent, which would have enabled him to have made a prudent Disposition, in due time, and to have calculated the Duration of the Siege, by the State of the Provisions. By which means, his Majesty might have suffered more Troops to continue in the Place, were it practicable to subsist them for a longer Time.

After this Examination of the capital Errors, committed by M. *de Surville*, with Relation

lation to his not obtaining that Knowledge of the Place, both within and without, as would have enabled him to make a good Defence; we will now enquire, whether he conducted himself better, in the Defence of *Tournay*, from the Time it was invested, to the Day of its Capitulation.

As I have already considered what Effect the Waters might have had, in diminishing the Number of the Attacks, or, at least, in obliging the Enemy to form them at a less Distance from each other, which would have relieved the Soldiers from the Fatigue of sustaining three such remote Attacks; my Reflections shall follow the Order of the Journal of that Siege, that the Weakness and Incapacity of the Defence, against these three Attacks, may be rendered more apparent.

The Journal observes, that on the 27th of *June*, about six in the Morning, a Body of Cavalry was seen, towards the Gate of *Lisle*, and that when a View had been taken of those Troops, it was concluded, that the Enemy were beginning to invest the Place: That this Investment began to be formed, on the 28th, and was compleated on the 30th. That the first and second of *July* were employed in forming the Camp, and that *M. de Surville* then began to take his Precautions for the Subsistence of his Garrison, and for disposing the Place into a State of Defence.

It

It appears by this Passage, which is exactly transcribed from the Journal, that *M. de Surville* never imagined, till the first of *July*, that he should be attacked; and that he had not taken any Precaution, either for the Subsistence of the Garrison, or preparing the Place for a Defence. We may reasonably conclude, therefore, that he never, till that Time, was attentive to regulate the Dispositions for the Defensive, by an exact Knowledge of the Provisions, and Expedients, contained in the Place.

We will now consider, whether his Knowledge of the Fortifications, gave him a proper Idea of those Attacks the Enemy might form, and what Measures he took to defeat them, or at least to abate their Vigour.

From the first of *July*, to the 7th, at Midnight, the Journal is silent, as to any Dispositions made within the Place, by *M. de Surville*, except his setting Fire to the Suburbs of the *Lisle* and *Valenciennes* Gates: And I can only find, that the Besieged were in perfect Ignorance of the Places where the Enemy were forming their Attacks; and that there were so few Soldiers upon the Scout, at Night, that the Enemy had broke up the Earth, for their three Attacks, above an Hour before the Besieged had any Knowledge of their Proceeding. After which *M. de Surville* ordered a great Fire from the Cannon, but,

but, in all Probability, without knowing how to direct it, since it does not appear, that any Troops were ordered out, to survey the Ground possessed by the Enemy, that the great Fire might be rightly pointed, in Consequence of such a Discovery. And I am informed, by the Journal, that the Enemy's Works were not viewed, till the 8th, in the Morning, when it appeared that three Attacks had been carried on, 80 Fathoms along the Saliant Angles of the Covert-Ways.

Can a Person who commands in a Place, be possibly excused, for suffering the opening of Works, for three different Attacks, to be stolen upon him, in such a manner; and for neglecting to gain Intelligence, by Men posted on the highest Steeples, in what Places the Fascines were laid; that so a Judgment might be formed of the Attacks? Was it not equally inexcusable in him, not to dispatch proper Scouts, at Night, to gain Intelligence of the Advance of Troops, towards the Quarters marked out for opening the Trenches, and to inform the Soldiers on the Counterscarp, of what past, that they might be enabled to direct their Fire, when the Works were begun, or when the Troops appointed to support them, made their Advances? And yet not one of these inconsiderable Precautions was taken, nor was it known,
till

till Midnight, that the Trenches were opened for the three Attacks.

The Journal adds, that *M. de Surville* did not begin to make his Dispositions, for the Service of the Troops, against the three Attacks, till the 8th in the Morning; and he then divided the twelve Battalions, into four Brigades, and kept 400 Dragoons, for a Body of Reserve.

I am unable to comprehend how this Division, into four Brigades, could possibly correspond with three Attacks. If the Journal had declared, that the fourth Brigade was appointed to relieve the other three, that the Soldiers might have every fourth Night allotted them, for Rest and Refreshment; or that there was no other Fatigue, each fourth Night, but that of the Guard within the Place, which was judged necessary to prevent all Disorders, among a numerous People, whose Fidelity was dubious, I should have thought this Disposition very just. But it seems the Troops of this Brigade were dispersed along the Ramparts, near the three Attacks, in order to be posted where it should be thought necessary; and were never employed to relieve one entire Guard. By which means, the Troops appropriated to the three Attacks, were fatigued, from the very first Day, without the least Intermission; which is a Service not to be required, with any
Justice,

Justice, from the natural Constitution of Man.

From the 8th to the 14th, I find nothing, on the part of the Enemy, but the usual Conduct in advancing the Works towards the Place, and planting a great Train of Artillery; and can discover nothing, on our part, during all that Time, but two slight Sallies of 20 Grenadiers, who dislodged the Enemy's Men from the Demi-Sap, without meeting with any Troops appointed to protect that Work, against such little Sallies; in which particular the Enemy seem to have been too remiss; and this Discovery should have rendered those Sallies more frequent, since they were so successful, that our Grenadiers brought off the Gabions that were disposed along the Sap.

On the 4th, in the Morning, our Troops observed, that the Enemy had advanced a little Branch of the Trenches, at the Quarter where the Attack of the seven Fountains was carried on. This Circumstance is related very slightly, in the Journal; undoubtedly because no serious Reflections were made, on our Part, with Relation to this Work, which will appear, by the Sequel, to have been of great Consequence; since our Disregard of this hazardous Branch, made the Enemy sufficiently sensible of our weak Defence, and encouraged them to make their Advances to
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the Bastion of *Blandinois*, between the Horn-works of the seven Fountains, and the *Lisle* Gate, before they were Masters of the Horn-Work of the seven Fountains, and without regarding any other, but that of the *Lisle* Gate, as will be evident in the Course of this Siege.

It was observed, the ensuing Midnight, that the Enemy were making their Dispositions, for attacking the advance Covert-Way of the Gate of *Valenciennes*. This Work was not begun, till after the Place was invested, and consequently was in no state of Defence; and therefore it was abandoned, before the Attack began. But the Fire from the Covert-Way, was so violent, that the Enemies were obliged to quit their Lodgment, and our Men resumed their Post there, till the Evening of the 15th, when it was judged to be no longer sustainable. As I have already mentioned this Advance Covert-Way, in my Reflections on the Advantages that might have been derived from the Waters of the *Scheld*, and particularly with Respect to the Frustration of this Attack on the Gate of *Valenciennes*, by opening this Way, in several Places, in order to pour the Water on the Right; I shall not take any other Notice of this Work, when I have observed, that this Attack was the Result of our first Error, in not raising the Sluices time enough to enlarge the Inundation. This

HISTORICAL *and* MILITARY. 350

This Error occasioned an unnecessary Work on the 16th, which increased the Fatigue of the Garrison; since it does not appear, by the Journal, that the Inhabitants of *Tournay* were employed to relieve the Garrison, from any of their Fatigues, which is contrary to my Rules for defensive Dispositions, wherein I declare, that the Troops should only be charged with the perillous Fatigue of the Defence, and that the Inhabitants should contribute all, on their Part, that can possibly afford the Garrison any Relaxation from their Toil. The Work I mentioned, was the Intrenchment which was begun on the 16th, by the Orders of M. *de Surville*, and was to be carried on, from the Rampart of the Body of the Place, near the Mills, to the Covert-Way of the Citadel, and which would have been altogether needless, had the proper use been made of the Waters of the *Scheld*, for avoiding this Attack on the Gate of *Valenciennes*.

I have already intimated, that the hazardous Branch of the Trenches, in the Quarter where the Attack of the seven Fountains was carried on, and which had not been seriously considered on our Part, was, however, a Work of great Consequence, and accordingly appeared to be such, on the 17th, when M. *de Surville* having drawn off the Troops, who were posted along the Covert-Way

Way at the Head of the Horn-Work of the seven Fountains, and only continuing to possess the Places of Arms; the Enemy made a Lodgment, without Opposition, on one of the Angles of the Covert-Way of that Work. It has been reported, that *M. de Surville* was obliged to have recourse to this Proceeding, for want of Troops; but may it not be more properly imputed to want of Judgment, to make a right use of the Troops he really had? He did not believe himself in a Condition to support his Covert-Way, by open Force; but was it not because he had neglected to prepare that Way, by a double Palisade, and a good Banquet? I am persuaded, that if he had observed that Precaution, he might have, at least, sustained it for some Time, and have destroyed such a Number of the Enemies, in the Attack, as would have obliged them to make their future Approaches with more Circumspection, which would have prolonged the Defence. We find that the Enemy, that very Night, attacked the palisaded Wall, that rose between the Covert-Way and the Attack of the *Valenciennes* Gate, and the Advance Covert-Way, which had been abandoned, but they lost a great Number of Men, and were unsuccessful in their Attempt; because the Front of those who opposed them, was more extensive than their own. If this Disposition had been observed,
in

in the Attack of the seven Fountains, the Enemy would not have conducted themselves as they did, and as I shall now describe.

We are informed, by the Journal, that on the Night which intervened between the seventeenth and eighteenth, the Enemy made a Lodgment on the Angle of the Covert-Way, before the Bastion of *Blandinois*, which, as I have already observed, is between the two Horn-Works of the seven Fountains, and of *Lisle*. They had not, at that time, made a Battery in Breach, in the Horn-Work of the seven Fountains, after they had made a Lodgment on an Angle of the Covert-Way: They conducted themselves, by a double Sap, to the Bastion of *Blandinois*, between the two Works.

I cannot think any Defence could be weaker, or more injudicious than this, or that we have any Instance, wherein a Conduct, of this Nature, in an Attack, was ever suffered by a Man charged with the Defence of a Place. To what Purpose did M. *de Surville* employ, during the whole Siege, those 400 Dragoons, whom he kept as a Body of Reserve; and those four Brigades that were distributed along the Ramparts? Why did the Besieged not make one Sally upon a Work conducted with so much Hazard as this double Sap, and before so considerable a Front, as that of the Place, between the two

Horn-Works, and the two Flanks of these Works? such a Defence as this is altogether inexcusable.

It even appears, by the Journal, that the Lodgment on the Covert Way, at the Angle of the Bastion of *Blandinois*, was made before it had any Communication, by this double Sap, which presents us with a new Subject of Astonishment. For, as I have already observed, the Enemy were always suffered to conduct themselves, without any Molestation, in the Attack of the seven Fountains, tho' the least Opposition would have rendered this Work extremely difficult; and I don't find that there were any Sallies, but those on the Attack of *Valenciennes*, which were very successful, and a few slight ones on the Attack of *Marvis*.

When the Enemy had been suffered to establish themselves, on the Bank of the Ditch of *Blandinois*, on the 22d, it was thought advisable to open a Flow of Water into the Ditch, five or six Foot deep. If the Defence had been judiciously conducted, till that time, this would have created a new Obstacle to the Enemy; but it was then too late, to retard the taking of the Place, by that Attack; and the Journal does not furnish me with any Instance of Attention, on the part of M. *de Surville*, to the Attack of *Valenciennes*, which he might have defeated, had he
made

made a proper Use of the Waters of the *Scheld*.

The Enemy, on the 23d, extended a Parallel to their Left, on the Attack of *Valenciennes*. Our Engineers thought this Work too remote, to be then capable of any Effect against our Countermines of the Citadel, and were persuaded, that this Parallel, which was the second, was only intended to facilitate Lodgments, for Security of the Works under Ground; which was a very weak Imagination. It had been observed, some Nights before this, that the Enemy had drawn a Parallel, on the Right of the Attack, to the Bank of the Inundation; they were sensible, that *M. de Surville* had caused a large inward Intrenchment to be formed, and their only Obstacle was at this Attack. These Parallels, therefore, prepared them a Front of Fire, to oppose that of the Gate of *Valenciennes*, and the Intrenchment, when they should attack the Breach of *Valenciennes*, by open Force.

The Journal likewise acquaints me, that the Enemy did not make their Descent into the Ditch, to the Demi-Bastion, on the Left of the seven Fountains, and the Bastion of *Blandinois*, till the 25th. It is evident, therefore, that this Attack, on *Blandinois*, had continued unmolested, between the two Horn-Works, till that very Day; which is an Instance of Weakness or Incapacity, that

will always surprize me, and I can never mention it too often, that the same Conduct may never be repeated, in the Defence of a Place. For it is certain, that this Attack on *Blandinois*, was perpetually exposed, and could have no Security, but from the Enemy's Conviction of the Weakness of our Defence.

In order to prove my Observation on the wrong Judgment which our Engineers made of the second Parallel, formed by the Enemy, on the Left of their Attack on *Valenciennes*, I need only add, that they assaulted the Covert-Way, by open Force, in the Night, after the 26th, and were thrice repulsed, tho' they, at last, made a Lodgment, on the Ruins of the Intrenchment at the Gate.

I am not able to comprehend this Disposition, in the Fortification of a Place, for it should seem, by the Journal, that the Intrenchment was without the Covert-Way, which is contrary to all Rules in the Art of Fortification. The Fact, however, is as I have related it; for it appears by the same Journal, that the Enemy compleated this Lodgment, in the Night, before the 27th, and extended it to the Sap, on the Right, and Left, along the Palisade. The Enemy, the same Night, carried the Bastion of *Blandinois*, assaulted and where were only 100 Men; after which they took the Horn-Work of the seven Fountains,

tains, where they could only make a Lodgment above the Breach, on Account of the Fire of our Troops, from the Half Moon of the Gate.

It surely must be a surprising Circumstance, to see the Bastion of *Blandinois*, which was embodied with the Place, and protected by the two Horn-Works of the seven Fountains, and *Lisle*, assaulted and carried, before the Enemy had made themselves Masters of the Horn-Work of the seven Fountains, and without regarding the Horn-Work of *Lisle*.

The Night before the 28th, was employed by the Enemy, in making their Dispositions for assaulting, by open Force, the Breaches of the three Attacks; which being observed by M. *de Surville*, he called a Council of War, where the *Chamade* was unanimously voted; and I am not surprized at such a Resolution; for it is certain, that the Place could not hold out any longer, but it is equally true, that the early Surrender of *Tournay*, can be only imputed to the Weakness and Incapacity of the Defence.

My Reflections on the Siege of the Citadel, will be very short; and it will be sufficient to observe, that it began to be attacked, the Night before the 30th of *July*, and surrendered, the first of *September*, for want of Provisions.

Thus did the meer Neglect, in furnishing proper Supplies of Bread, for the Garrison, cost his Majesty, in the space of thirty Days, the best Citadel in *Europe*, with Respect to the Difficulties it was capable of creating, in the Protraction of an Assault; because it was entirely countermined, through the whole Circumference of its *Glacis*, and Works; and might have sustained a Siege, at least four Months, if the Garrison had been furnished with a Subsistence for that time. The Omision to provide it, was a capital Misconduct, in the Minister; but M. *de Surville* ought to be eternally reproached, for his Inattention to discover what Quantity of Corn was contained in the Place, besides what belonged to his Majesty.

ADVERTISEMENT.

I would advise all Governours, to keep a Journal of a Siege, which should be communicated to those who ought to be daily acquainted with the State of the Place.

I have not known any Governour, who ever kept a Journal, in the manner I propose, and am apprehensive their Neglect proceeded from a Conviction, that their Conduct was not altogether excusable, either with Reference to the regular Defence of the Place,

Place, or the Application of the King's Money, during the Siege. As to my Particular, I am well persuaded, that the manner I have recommended, ought to be observed by a Governour, who is desirous to make a good Defence, and who prefers the Service of his Prince, and his own personal Glory, to any sordid Considerations that are unworthy a Man of Honour. This should have been the Rule of my Conduct, had I been commissioned, by his Majesty, to defend one of his Places, and this is the Admonition I now offer to my Son. A Governour, by these Means, will render his Conduct irreproachable, and his Sovereign will then have an Opportunity of dispensing just Rewards to those, whose Services, attested by the Journal, have merited a Compensation.

I have no particular Observations to make, on any Circumstances relating to the Regularity, or Tenaciousness of a Governour, in his manner of defending all the different Attacks of his Place; since I can offer nothing on this Subject, in the Nature of a general Proposition, except this one Remark, namely, that a Governour should be indefatigable in his Endeavours to dispute, with his Enemy, first, the Ground adjacent to the Place, and then, the Works: And these are the only Measures that constitute the Beauty and Duration of the Defence.

C H A P XLIX.

Of Winter Quarters.

I Have represented, in my Maxims, the manner of settling Winter Quarters, as well in the Dominions of the Sovereign, as in those of the Enemy. But my present Reflections shall only extend to those Winter Quarters, I have seen taken in an Enemy's Country.

In the Winter, between the Years 1672, and 1673, the Marshal *de Turenne* fix'd his Winter Quarters, in the *Westphalian* Dominions of the Elector of *Brandenburg*, after he had obliged that Prince to repass the *Weser*, as I have observed in a former Chapter.

It will be proper for me to relate the Precautions, taken by the Marshal, for the Security of the Quarters, his Army possessed.

The Head Quarters, towards the *Weser*, were in strong Towns, where Bodies of Horse and Foot were likewise posted. The flat Country, which depended on the Towns, was divided among the Troops who were quartered in those Towns, and was appointed to furnish them with their Subsistence, as well in Kind, as in Money; and all the Troops
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of the first Line, were in the Head Quarters. Those of the second, who were nearest *Lipstat*, a Town belonging to the Elector of *Brandenburg*, and in which, that Prince had a strong Garrison, were disposed in the same manner as the first Line, with this Difference only, that they were obliged to be attentive to the Garrison of *Lipstat*, for their own Security.

Marshal *de Turenne*, besides these Precautions, was careful to mark out a Field of Battle, at the Head of the Quarters of the first Line, where he fixed the general Rendezvous of all the Quarters of the Army, each of which marked out their Routs, for their orderly and expeditious Arrival at the Field of Battle, in case the Enemy, during the Winter Season, should attempt to repass the *Weser*, to attack the Quarters, which were always secured by these judicious Precautions.

In the Winter, previous to the Year 1679, the King's Army, after the Peace of *Nimeguen*, took their Winter Quarters in the *Spanish* Territories of *Cleves*, along the *Maes*, and in the Dominions of *Liege*.

The Elector of *Brandenburg* had not signed the Treaty of *Nimeguen*, for the Restitution of the *Swedish* Dominions in *Germany*, which this Prince had conquered in the Course of the preceding War; and the King, by an
Article

Article of that Treaty, had reserved to himself, a Right to compel the Elector to that Restitution. It was therefore necessary, that the Army appointed for that Expedition, should winter in a Country that would be commodious for their March into those Dominions ; for which Reason, neither the *Spaniards* nor *Dutch* opposed their taking Quarters in the manner I have mentioned, and they remained so unmolested, for the same Reason, that several Bodies of Troops were disposed in the Villages of the flat Country.

In the Winter before the Year 1689, and after the Conquest of *Philipsburg*, and the Places in the *Palatinate*, his Majesty caused one Part of his Army to winter on this Side of the *Rhine*, and the other Part, along the *Necker*. These Quarters were not unmolested, but were raised at the Close of *January* ; not that there was any sufficient Reason for that Proceeding, but only through the Misconduct of *M. de Montclar*, who commanded in the whole Extent of that Frontier. The King's Troops possessed the *Necker*, from *Tubingen* to *Manheim*, and consequently the Territories between the *Necker* and the *Rhine*, except the City of *Stuttgart*, the usual Residence of the Dukes of *Wirtemberg*, and where his Majesty, out of Regard to that Prince, would not suffer any Troops to be quartered. The

The *Imperial* Garrison of *Philipsburg*, retired, after that Place was taken, to *Ulm*, and they were all the Troops the Emperor had, on this side of *Austria*, and *Bohemia*. The Circles of *Suabia* and *Franconia* had very few Troops, in those Dominions; the rest were then in *Hungary*, where they only began to make the Dispositions for their Return to the Empire. In a Word, there were no Troops for 60 Leagues round our Quarters, who durst attempt to molest them. And yet *M. de Montclar*, upon a false Intelligence of the Approach of a great Body of Forces, raised all his Quarters, on this side of the *Rhine*, so very suddenly, that it rather resembled the ignominious Flight of an Army, than the Motion of Quarters regularly raised.

This Example is a sufficient Proof that a Prince should always devolve a Command of this Nature, on a judicious General, whose Intrepidity likewise is well known.

C H A P. L.

Of Contributions.

MY general Reflection on this Subject, is, that when Contributions are not judi-

judiciously established and demanded, it may be commonly concluded, that the private Advantage of those who impose or receive them, prevails over the Interest of the Prince; because a Time of such Confusion is a favourable Season for making unlawful Profits; in which Case, a Prince cannot too severely punish those whose Avarice prompted them to commit such Enormities.

I have before observed, that Contributions are of two Sorts; One in Kind, the other, in Money. The Imposition and raising of the former, are often attended with such indirect Practices, as these that follow. Perhaps 20000 Palisades may be demanded of a Country that cannot, with any Conveniency, furnish above 10000. The Inhabitants, who are thus overcharged, will represent the Impossibility of providing this Supply; upon which an Agreement will be made to receive an Equivalent in Money, for 1000 Palisades, which will never be accounted for, to the King; because the Number of Palisades, that are wanted, will be regulated by making the general Repartition. Palisades likewise may be demanded from very remote Communities, which will render their Carriage very incommodious. Pecuniary Contracts, therefore, are made, with Reference to that Carriage, and the like Conduct is observed, in the other Reparations of Contributions in Kind.

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HISTORICAL *and* MILITARY. 365

With respect to the fraudulent Management of Contributions received in Money; it is very usual to demand Contributions of this Nature, from distant parts of the Country, after which, some Obstacles may arise, that will render it difficult to enforce the Payment, and which furnish a Pretext for representing this Country as insolvent in the written Account of the Contributions; tho' the Inhabitants have been compelled to pay part, or perhaps, the whole Demand, in Consequence of those Apprehensions of severe Treatment, that have been infused into them, by Agents employed and well paid for that Purpose. And if, for the better Concealment of the Fraud, part of the Money so received, be brought to Account, it is look'd upon as an Instance of strict Integrity, tho' the Profits that have been made, by this indirect Practice, were very considerable.

Other Frauds are likewise committed, with Reference to the Protraction of the Payments imposed. A Contribution in Money, for Instance, may be demanded, either in the Time of Harvest, or else when the Husbandmen are employed in sowing their Lands; at which Seasons the People are always much engaged in their Business, and when the Payments are then demanded of them, they are obliged to purchase a longer Time.

I could

366 M E M O I R S

I could produce several Instances of Impositions of this Nature, but as they are not material to my present Subject, I shall only remind those Persons who are intrusted with Stations of Command, by their Prince, that it is incumbent on them to be vigilant over the Conduct of those who are commissioned to raise Contributions; and to cause them to be brought to Justice, in case they act inconsistently with the Trust reposed in them.

As I have before observed, that there are Measures for a Prince to concert, with his General, for the Ease of his *Finances*, in the Course of a War, and to cause the greatest part of the Expences to be sustained by those Powers with whom he is in a State of Hostility; I think it proper to relate some Instances, wherein the Conduct necessary, in such a Conjunction, was either pursued, or disregarded; in order to make it evident, that, during this last War, the Negligence, or Incapacity of *M. de Chamillard*, has rendered the Operations of it so burdensome and expensive, that the King's *Finances* are entirely exhausted. The War which commenced in 1701, was altogether auxiliary, on the Part of the King of *France*, in Favour of *Philip* the 5th of *Spain*, when his Majesty assisted with all his Troops, to maintain him on the Throne, in Opposition to the unjust Pretensions of the *German House of Austria*, and its Allies. The

The first Army was formed for the Service in *Italy*, where *Philip* possessed the Kingdoms of *Naples*, and *Sicily*; the Dutchy of *Milan*; the maritime Places in *Tuscany*; and the Island of *Sardinia*. The Allies of the two Crowns, were the Dukes of *Savoy*, *Mantua*, and *Parma*: But the *Pope*, the *Grand Duke*, the *Republicks of Venice*, and *Genoa*, seemed inclinable to a Neutrality. Why then did we not draw, from these Powers, such Contributions, in Money, as would have been sufficient to pay our Armies, or, at least, the extraordinary Expences; under pretext that their seeming Neutrality, was rather an Evidence of their favourable Disposition to our Enemies, than any real Inclination to continue in a State of Tranquillity?

Has not Prince *Eugene*, who still continues at the Foot of the *Alps*, convinced us, that he marched the Emperor's Forces into *Italy*, with an Intention to subsist them in that Country, and to pay them at the Expence of those Powers who affected a Neutrality, with Relation to us? Was not this Conduct a sufficient Inducement to us, to proceed in the same manner? and could we not have subsisted our Armies, in that Country, with more ease than Prince *Eugene*? But instead of taking any Measures to that Effect, our Troops were entirely paid, by Remittances of Money from *France*; and to such a Degree of Misconduct,

368 M E M O I R S

conduct, with Regard to the King's Interest, that we paid 72 *per Cent.* in the Course of the Exchange, for all the Money we sent into *Italy*; while Prince *Eugene* not only paid his Troops, out of the Contributions he received from those Powers, but even remitted considerable Sums to the Emperor, because he had a Surplus in his Hands.

Has not our Negligence, in this Article of Contributions, while our Enemies improved it so much to their Advantage, been productive of such fatal Events to *France*, as demonstrate the Truth of my Maxims, with Respect to those Attentions, which a Prince, who engages in a War, should cause his Minister, as well as his General, to observe, in order to diminish, as much as possible, the Expence of his own *Finances*, and to throw the Weight of it, either on the Enemy, or those neutral Powers, who decline any Participation in the War?

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A M I L I T A R Y D I C T I O N A R Y.

A D J

ADJUTANT, or *Aid-Major*, is an Officer appointed to ease the Major in his Duty: he nightly receives the Orders from the *Brigade-Major*, which he carries to his *Colonel*, and then delivers them to the *Serjeants* assembled in a Ring. If there be Detachments for Convoys, Guards or Parties, he gives the Number each Company must furnish, with the Hour and Place of Rendezvous: he places the Guards, and makes Detachments for what other Guards the Regiment is to furnish. He receives and distributes Ammunition to the Companies, keeps a Roll of the Officers, to do them Justice in their Duty; and, by the *Major's* Order, regulates the Price of Bread, Beer, Meat, &c.

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to prevent the Men's being imposed on by the *Sutlers*. Each Regiment of Horse has an *Adjutant*, and a Regiment of Foot has one for each Battalion.

Advance-Fosse, is a Moat round the *Glacis* or Esplanade of a Place to prevent a Surprise.

Aid de Camp is an Officer employ'd under the *General*, to carry his Orders; a *Lieutenant-General* is allowed two *Aids de Camp*, and a *Major-General* one.

A L A R M is a sudden Calling to Arms, upon an Apprehension of Danger from the Enemy; a false *Alarm* is sometimes occasion'd by a fearful and negligent *Centinel*, and sometimes designedly by a diligent Officer, to try the Vigilance of the Guards.

ANG

Alarm-Post is the Ground appointed by the *Quarter-Master-General* for each Regiment to march to, in case of an *Alarm*: *Alarm-Post* in a Garrison, is the Place allotted each Regiment to draw up in.

AMBUSCADE or *Ambush*, is a lurking Party in a Wood, or other convenient Place to surprize an Enemy.

AMMUNITION implies all sorts of Military Stores.

Ammunition-Bread is carried with an Army for the Subsistence of the Troops; each *Soldier* receiving a Loaf of six Pound every four Days.

ANGLE in Fortification, is thus explain'd. (1.) *Angle of the Center*, is made by two Lines drawn from the Center, to any Side of the Polygon. (2.) *Angle of the Polygon*, is made by the meeting of two Sides of the Polygon, and is the same with the *Angle of the Gorge*. (3.) *Angle of the Curtin* or of the *Flank*, is form'd by meeting of a Flank and a Curtin. (4.) *Angle of the Shoulder*, is formed by one Face and one Flank. (5.) *Flanked Angle*, is the meeting of two Faces. (6.) *Angle of the Tenail*, or *Flanking Angle*, is composed of the Line of Defence and the Curtin. (7.) *Angle forming the Flank*, is an Angle composed

ARM

of one Flank and one Demi-gorge. (8.) *Angle forming the Face*, is the inward Angle, composed of one Flank and one Face. (9.) *Angle of the Moat*, is formed before the Center of the Curtin, by the outward Line of the Fossè. (10.) *Angle Salliant*, or *Sallying Angle*, advances with its Point toward the Country; such is the Angle of the Counterscarp before the Point of a Bastion. (11.) *Angle Rentrant*, or *Reentring Angle*, points towards the Body of the Place; as the Angle of the Counterscarp before the Center of the Curtin.

ANTESTATURE is a Retrenchment hastily made of Gabions or Palisades, to check an Enemy who is gaining Ground. This is call'd to Dispute Ground.

APPROACHES are the Trenches, Places of Arms, Lodgments, Sap, Gallery, and all Works whereby the Besiegers advance towards a Place; see *Attack* and *Trench*.

ARMS; *Place of Arms* in a Garrison, is a Place allotted for the Garrison to draw up in, upon any Alarm, or other Occasion. *Place of Arms* at a Siege are small Redoubts edged with a Parapet, containing a small Party of Men, to defend the Trenches against Sallies.

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ARMY is a Body of Troops consisting of Horse, Foot and Dragoons, with Artillery and Provisions. It is divided into Brigades.

Flying-Army is a small Body under a *Lieutenant* or *Major-General*, sent out to harass the Country, intercept Convoys, prevent the Enemies Incurfions, cover its own Garrisons, and keep the Enemy in continual Alarm.

Wings of an *Army*, are the Troops encamped on the Flanks; they are generally Horse and Dragoons, and are called the Right and Left Wings.

ARTILLERY is a Magazine of all sorts of Arms and Provisions for an Army, as Cannon, Mortars, Bombs, Balls, Petards, Grenades, small Balls, Powder, Match, all sorts of Hand-Tools, Planks, Boards, Rope, Coal, Tallow, Pitch, Rosin, Sulphur, Salt-petre. Quickmatch, all sorts of Fire-Works, Pontons, and many other Things. The Attendants are *Conductors*, *Bombarders*, *Gunners*, *Matrosses*, *Pioneers*, *Ponton-Men*, *Carpenters*, *Wheelwrights*, *Smiths*, *Coopers*, *Tin-Men*, and *Collarmakers*.

Artillery-Park is a Place appointed by the *Quarter-Master-General* in the Rear of

ATT

both Lines of the Army for encamping the Artillery which is drawn up in Lines; the Guns are in one Line; the Ammunition Waggon form two or three Lines, 60 Paces behind the Guns, and 30 from each other; the Pontons and Tumbrils make the last Line: The whole is surrounded with a Rope, which forms the *Park*. The *Gunners* and *Matrosses* encamp on the Flanks, and the *Conductors*, *Bombarders*, *Ponton-Men* and *Artificers* in the Rear.

ASSAULT or *Storm*, is the Effort made to carry a Post, and is generally made by the Regiments that have the Guard of the Trenches, sustained by Detachments from the Army; while the Assault continues, the Batteries cease for fear of killing their own Men.

ASSEMBLY is the second Beat of Drum before a March; the first is called the *General*, the *Soldiers* then prepare to march; the second is called the *Assembly*, at which they strike, and roll up their Tents, and stand to their Arms; and the third is called the *March*, and then the Army begins to move.

ATTACK; to attack a Fort, a Post, or a Body of Troops, is the same as to assault, or endeavour to carry

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a thing by force; it is a much properer word than *Assault*.

Attack; the Attacks in a Siege are the Works, whereby the Besiegers advance under Cover to the Place. There are commonly two Attacks, each mounted by a General Officer, and these have mutual Communication, by Lines or Trenches, parallel to the Polygon of the Place, that they may not be enfiladed, and are called the Parallels, the Boyau, or the Lines of Communication.

False Attacks are never carried on with that Vigour, as the other; being designed to favour the real Attack by amusing the Enemy, and obliging the Garrison to a stricter Duty.

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BACULE is a Gate made like a Pit-fall, with a Counter-poize before the *Corps de Gardes* advanced near the Gates, which is supported by two great Stakes.

BAGGAGE - WAGGONS are those in which the Officers and Regiments Baggage is carried; before a March they are appointed a Rendezvous, and are there marshall'd by the *Waggon-Master-General*, according to

B A G

the Rank the Regiments have in the Army. On a March they are sometimes ordered to follow their respective Columns of the Army, sometimes to follow the March of the Artillery, and sometimes to make a Column by themselves. The *General's* Baggage is first. If the Army march from the Right, the Baggage of that Wing has the Van; if from the Left, the Baggage of the Left has the Van; Each Waggon has a distinguishing Flag to show to what Regiment it belongs.

BAGONET is a short broad Dagger, made with Iron Handles and Rings that go over the Muzzle of the Firelock, and are screwed fast; so that the *Soldier* fires with the Bagonet on the Muzzle of his Piece, and is ready to act against Horse.

Ball, Red-hot Ball, are made hot in a Forge near the Gun: Which being loaded with Powder, and wadded with a green Turf, is spung'd with a wet Sponge, and laid at a small Elevation; that the Ball which is taken from the Forge with a long Iron Ladle may slide down, the *Gunner* at the same time being ready to Fire: It not only fires combustible Matter, but floors and Planks.

Ball, Fire Balls. are a Composition of Meal-Powder, Sulphur,

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phur, Saltpetre, Pitch, &c. for Firing Houses that incommode Trenches or Advance Posts; and are thrown by *Soldiers*.

BANQUETT in Fortification, is a Foot Bank of Earth about a foot and a half high, and three broad, raised on the Rampart at the Foot of the Parapet, for the *Soldiers* to mount on to fire over.

BARBE, *to fire in the Barbe*, signifies firing over the Parapet, instead of using the Embrasures; the Parapet must not be above three Foot and an half high.

Barrels, Thundering Barrels are filled with Bombs, Grenades, and other Fireworks, to be rolled down a Breach.

BARRICADE, a Term sometimes used for a Fence of Palisades.

BARRIERE is a Gate of Wooden Bars, about five Foot long perpendicular to the Horison *A*, which are kept together by two long cross Bars, and another crossing Diagonally. They are used to stop the Cut that is made through



B A S

the Esplanade, before the Gate of a Town *B*.

BASE or *Basis*, of a Rampart, is where it joins the Ground on which it stands; *Basis* of a Parapet, is, where it joins the top of the Rampart.

Base, see *Cannon*.

BASKETS, small *Baskets*



A, are used in Sieges on the Parapet of the Trench *B*, they are filled with Earth, and about a Foot and a half high, about a foot and a half Diameter at top, and 8 or 10 Inches at bottom; so that when set together, there is a sort of Embrasures, *C*, at their Bottoms, through which the *Soldiers* fire without being exposed.

BASTION is a Mass of Earth raised on the Angles of the Polygon, compounded of two Flanks, and as many Faces, sometimes cased with Brick or Stone. They are distant from each other about 150 Yards: Are *regular*, when the Extent of their Faces is equal, their Flanks the same, and the two Angles of the Shoulder equal: Or *Irregular*,

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where

B A T

where that equality is omitted: Or *Deformed*, where the Irregularity of the Lines and Angles makes the Bastion disproportioned. They are *hollow*, when only surrounded with a Rampart and Parapet, leaving the inward Space empty: Or *solid*, when that Space is raised to the Height of the Rampart.

Bastion-Flat is when the Side of the Polygon being twice the usual Length, a Bastion is raised before the middle of the Curtin, which, as its Capital is short, has the flanked Angle very obtuse, which makes the Gorge large, and the Bastion very flat.

A *Bastion-detach'd*, One separated from the Body of the Place, and it differs from a Half Moon, whose Rampart and Parapet are not so high and thick as those of the Place, because it is equally proportioned with the Works of the Place.

Bastion, Double-Bastion is raised on the Plain of another Bastion, and is sometimes in the Nature of a *Cavalier*.

Demibastion is composed of one Face Flank, and Demigorge.

BATTALION is a Body of Foot, generally 700, exclusive of Officers and Serjeants, armed with Firelocks, Swords,

B A T

and Bagonets, divided into thirteen Companies, one of which is Grenadiers. The first Regiment of *English* Guards has four Battalions; the second Regiment, that of *Scots* Guards, and the Royal *Scots*, have two Battalions; the rest are but one Battalion each.

BATTERY is a Parapet thrown up to cover the Men employed about the Guns, from the Enemies Shot. This Parapet is cut into *Embrasures* for the Cannon to fire through; the inward Height of the *Embrasures* is about three Foot, but they slope lower to the Outside; they are two or three Foot wide, but open to six or seven on the Outside. The Mass of Earth between two *Embrasures*, is called the *Merlon*. The *Platform* of a Battery is a Floor of Planks and Sleepers, to prevent the Gun Wheels from sinking into the Earth, and slopes towards the *Embrasure*, to hinder the Reverse, and facilitate the bringing back of the Gun; see *Platform*.

Battery of Mortars differs from that of Guns, being sunk into the Ground, and without *Embrasures*; the *Dutch* call it *Kettle*.

Battery, Cross-Batteries are such whose Shot meet, and form an Angle. And as the

one

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one beats down what the other shakes, they do good Execution. *Battery d'Enfilade*, is what batters in Flank. *Battery en Echarpe*, is what batters obliquely. *Battery de Reverse*, is what plays upon the Enemies Back. *Comrade Batteries*, are those which play upon the same Place. *To raise a Battery*, is an Engineer's Business. *To bring Guns upon Battery*, if at a Siege, must be in the Night by Men, having Harness fitted for that use. *To ruin a Battery*, is to blow it up, or nail the Guns.

Battery-Master; his Province is to raise the Batteries; but that Office is now suppressed in *England*, though not in *Holland*.

Battle Array is the Order in which an Army is formed at a Review, and is more properly called the *Line of Battle*.

B E R M, see *Liziere*.

B I O V A C is a Night Guard, performed by the whole Army, when they are apprehensive of Danger from an Enemy.

B L I N D S are every thing that covers the Besiegers from the Enemy, such as Fascines, Gabions, Sand-Bags, Earth-Baskets, Wool-Packs, &c.

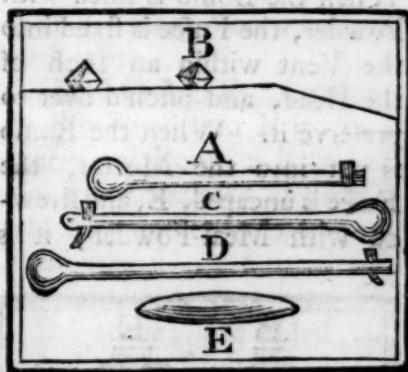
B L O C K A D E is the blocking up a Place, by posting Troops at all the Avenues to it, to prevent its receiving Re-

B O L

cruits of Men or Provisions, when the Intention is to starve it out, without making regular Attacks; this is called *forming a Blockade*. *To raise a Blockade*, is to dislodge the Troops that keep the Place blocked up from their Posts. *To turn a Siege into a Blockade*, is plain.

B O D Y or *Main-Body* of an Army, are the Troops encamped betwixt the two Wings, and are commonly Infantry.

B O L T S, in Gunnery, are of several Sorts; those between the Cheeks of a Gun

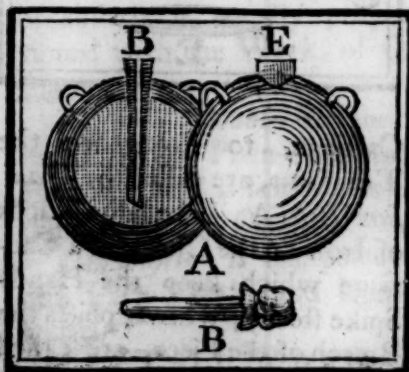


Carriage, to strengthen the Transoms, are called the *Transum-Bolts A*. The large Knobs of Iron on the Cheek of a Carriage which keep the Hand-Spike steady, when it poises the Breech of the Piece, are called *Prise-Bolts, B*. The two short Bolts, that when they are inserted in each end of an *English*

B O M

Mortar Carriage serve to traverse her, are called *Traverse Bolts*, E. The Bolts that pass through the Cheeks of a Mortar, and keep it fixed at the Elevation, by the Aid of Coins, are called *Bracket-Bolts*, C; and the four Bolts that fasten the Brackets or Cheeks of a Mortar to the Bed, are called *Bed-Bolts* D.

BOMB is a large Shell of cast Iron. A with a spacious Vent for the Reception of a Fusee B, which is made of Wood, and full of a Composition of Meal-Powder, Sulphur and Saltpetre. When the Bomb is filled with Powder, the Fusee is fixed into the Vent within an Inch of the Head, and pitch'd over to preserve it. When the Bomb is put into the Mortar, the Fusee is uncaped, E, and strewed with Meal-Powder; it is



fired from the Flash of the Powder in the Chamber, and

B O Y

burns all the while the Bomb is in the Air; when the Composition is spent, it fires the Powder in the Bomb, which being confin'd, bursts the Bomb in a violent manner, and blows up all about it.

Bombardeers are those employed about a Mortar; they drive the Fusee, fix the Shell, load and fire the Mortar, and work with the Fire-Workers on all Kinds of Fire-Works.

Bomb-Ketch is a small Vessel built and made strong with large Beams, for the Use of Mortars at Sea.

BONNET is a small Work composed of two Faces, with only a Parapet, and two Rows of Palisades of about 10 or 12 Foot Distance; it is usually raised before the Salient Angle of the Counterscarp, and communicates with the Covert Way, by a Trench opened through the Glacis and Palisades on each Side.

Bonnet a Pretre, or *Priest's Bonnet*, is a Work in Fortification that differs from a double Tenail in this, that the Sides of a Tenail are parallel, those of a *Priest's Bonnet* would meet were they prolong'd.

BOYAU or *Branch of a Trench*, is a Line, or a particular Trench, parallel to the Defence of the Place, to prevent the Troops from being

flanked

B R E

flanked or enfiladed. A *Boyau* when two Attacks are made upon a Place, performs the Office of a Line of Communication between them; the Parapet of a *Boyau* being still turn'd towards the Place besieged, serves for a Line of Contravallation to prevent Sallies, and protect Workmen.

BREACH is the Demolition of any part of a Fortification by the Cannon or Mines of the Besiegers, preparatory to an Attack upon the Place. To render the Attack more difficult, the Besieged sow the Breach with Crow-Feet, or stop it with *Chevaux de Frise*.

BREAK Ground, is the first opening of Trenches against a Place, which is performed in the Night, by the Advantage of some Eminences, hollow Way, or whatever will cover the Men from the Fire of the Enemy.

BREAST-WORK, see *Parapet*.

Bridge of Communication is a Bridge thrown over a River, by which two Armies or Forts separated by the River, communicate with each other.

Draw-Bridges are made in several manners, but the most common are formed with Plyers twice the Height of the Gate, and a Foot diameter; the inner Square is traversed

B R I

with a St. *Andrew's Cross*, which serves for a Counterpoize, and the Chains which hang from the other Extremities of the Plyers to raise or fall the Bridge, are of Iron or Brass. *Floating or flying Bridges* are composed of two small Bridges disposed one upon the other, so that the uppermost, by the Aid of Ropes and Pulleys, is pushed forwards, till its End join to the Place intended.

Bridge of Boats, see *Pontons*.

Bridge in Gunnery, is the two Pieces of Timber between the two middle Transoms of a Gun Carriage, on which the Bed rests.

BRIGADE. An Army is distributed into Brigades of Horse and Foot; a Brigade of Horse is composed of eight or ten Squadrons; a Brigade of Foot consists of four, five or six Battalions, commanded by a Brigadier; the eldest Brigade has the Right of the first Line, and the second has the Right of the second Line; the two next are in the left of the two Lines, and the youngest possesses the Center. The Battalions which compose a Brigade observe the same Order.

Brigadier is a general Officer who commands a Brigade; the eldest *Colonels* are commonly advanced to this Post, they

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they roll in Duty among themselves; he who is upon Duty, is called *Brigadeer* of the Day, and visits all the Out-Guards and Posts of the Army, and at Night receives the Orders from the *Major-general* of the Day, and delivers it to the *Majors* of Brigades, who must all attend at a regular Time. They march at the Head of their Brigades, and are allowed a *Serjeant*, with ten Men of their own Brigade for their Guard.

Brigadeers and *Sub-brigadeers*, are Posts in the Horse Guards.

Brigade-Major, is an Officer appointed by the *Brigadeer* to assist him in the Affairs of his Brigade; and acts in his Brigade, as a *Major General* does in the Army. The most able *Captains* are nominated to this Post. They are to wait at stated Times, to receive the Word and Orders which they carry first to their *Brigadeer*, and then deliver them to the *Adjutants* of Regiments at the Head of the Brigade, where they regulate together the Guards, Parties, Detachments and Convoys, and appoint them the proper Hour and Place of Rendezvous at the Head of the Brigade, where the *Brigade Major* receives and marches them to the general

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Rendezvous. It is incumbent on him to know the State of the Brigade, and to keep a Roll of the *Colonels*, *Lieutenant Colonels*, *Majors* and *Adjutants*. When a Detachment is to be made, the *Major General* of the Day settles with the *Brigade Majors*, the Number of Men and Officers each Brigade must furnish; and they again regulate with the *Adjutants* of the Regiments, what Complements each Battalion is to furnish, which the *Adjutants* divide among the Companies. The Complements each Regiment is to supply, are taken by the *Adjutant* at the Head of each Regiment at the Hour appointed, and he delivers them to the *Brigade-Major* at the Head of the Brigade, who again delivers them to the *Major General* of the Day, and he remits them to the Officer appointed to command the Detachment.

BRINGERS-UP are all the last Rank of a Battalion, composed of the last Man of each File.

BUDGE-BARRELS are small Barrels well hoop'd, with only one Head; on the opposite End is nailed a piece of Leather to draw together with Strings like a Purse. Their Use is for carrying Powder along with a
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Gun or Mortar, as they are less dangerous, and more port-



able than whole Barrels; they are also used on a Battery of Mortars, to contain Meal-Powder.

BULWARK is an old Term for Rampart, See *Rampart*.

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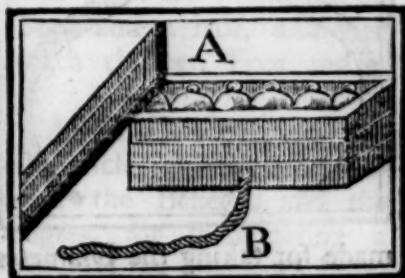
CADET is a young Gentleman, who to gain some Experience in Military Affairs, with a View of Preferment, is willing at first to carry Arms like a private Man in a Company of Foot. He differs from a Volunteer, because he takes Pay, which is no more than a

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private Man; but a Volunteer serves without Pay.

Cadet among the *French* signifies an Officer, who, in respect of another, is younger in Service.

CAISSON is a Wooden Chest, containing four or six



Bombs, sometimes filled only with Powder, and buried by the Besieged under Ground, to blow up a Work which the Besiegers are like to Master; when the Bonnet is blown up by the Mine, they place a *Caïsson* under its Ruins, and the Enemies being advanced to make a Lodgment there, they fire the *Caïsson* with a Saucifs or Pudding, and blow up the Post a second time.

CALIBER-COMPASSES are Gunners Compasses for taking the Diameters of the several parts of a Piece of Ordnance, or Bombs, Bullets, &c. Their Legs are circular on a brazen Arch, marked with Inches and half Inches, to shew how far the Points

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Points of the Compasses are opened afunder. Some are



made for taking the Diameter of the Bore of a Gun or Mortar.

CALTHROPS, see *Crow-Feet*.

CAMP is the Ground where an Army pitch their Tents, and is marked out by the *Quarter-Master-General*, who allots every Regiment its Ground. The chief Advantages to be considered in chusing a Camp, is to have it near Water, in a Country of Forage, and where the *Soldiers* may find Wood for dressing their Victuals; it ought to have a free Communication with Garrisons, for a constant Supply of Provisions. The *Quarter-Master-General* in chusing the Camp, should consider the Advantages of the Ground; such as Hills, Marshes, Woods,

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Rivers, &c. if the Camp be near the Enemy, and no River or Marsh to cover it, it ought to be entrenched. An Army always encamps fronting the Enemy, and generally in two parallel Lines about 500 Yards distant, the Horse and Dragoons on the Wings, and the Foot in the Center; sometimes a small Body of two, three or four Brigades encamps behind the two Lines, and is called the *Body of Reserve*. The Artillery and Bread Waggon are generally encamped in the Rear of the two Lines. A Battalion of Foot is allowed 80 or 100 Paces for its Camp, and 30 or 40 for an Interval, betwixt one Battalion and another. A Squadron of Horse is allotted 30 for its Camp, and 30 for an Interval, and more, if the Ground will allow it. Each Battalion posts a small Guard commanded by a Subaltern Officer, about 100 Yards before the Front of the Regiment called the *Quarter Guard*, for the Security of the Regiment; and each Regiment of Horse mounts a small Guard on Foot in the Front of a Regiment under a *Corporal*, called *Standard-Guard*. The Grand Guard of the Army consists of Horse, posted a Mile and a half from the Camp towards the Enemy, on the

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Right and Left, by the *Lieutenant* or *Major General* of the Day, who chuses the most commodious Places, from whence all the Avenues of the Camp may be discovered. At a Siege the Army encamp with their Rear to the Place. *Flying Camp* is the Ground on which a *Flying Army* are encamped.

CANNON is a Piece of Ordnance of Brass or Iron, of several Kinds and Dimensions from a *Cannon Royal* or *Cannon* of eight, which carries a Ball of sixty three Pound, to a *Base*, which is the lowest Class of Cannon. Those most used in the Army or Navy, are (1.) *Demi-Cannon*; for the *Cannon Royal* and *Bastard Cannon* are too large. It carries a Ball of 32 Pound, and is used in the lower Tire of a First Rate Man of War. (2.) *Twenty four Pounders*: (3.) *Culverins* carrying 18 Pound: (4.) *Twelve Pounders*. (5.) *Demi-Culverins* carrying nine Pound Ball. (6.) *Six Pounders*. (7.) *Sakers* carrying five and a quarter Pound Ball. (8.) *Minions* of 4 Pound, and (9.) *Three Pounders*, which are the lowest Nature of Guns used in the Field or Navy: Guns longer than ordinary, are called *Slings*, *Drakes*, &c. as those shorter are called *Cuts*.

CAP

The length of a true fortify'd Gun, is about seven Diameters of the Metal at the Vent; the Diameter of the Metal there being three Diameters of the Bore; so that a 24 Pounder being six Inches in diameter of her Bore, the Thickness of the Metal at the Vent must be a Foot and a half, and her Length thirteen Foot and a half.

CAPITULATIONS are the Articles agreed upon between the Besieged and the Besiegers, for surrendering a Place. The *Chamade* being beat, all Hostilities cease, and the Officer who commands in the Trenches, goes upon the Breach to hear the Enemy's Proposals. If they desire a Capitulation, the Governour sends Deputies to the General to treat, if the Capitulation be agreed to and signed, Hostages are delivered on both Sides, for the exact Performance of the Articles; part of the Place is delivered to the Besiegers, and a Day appointed for the Garrison to evacuate the Place. The usual and most honourable Conditions are, to march out at the Breach, with Arms and Baggage, Drums beating, Colours flying, Match lighted at both Ends, Ball in Mouth, with some Pieces of Cannon and Waggon, and Convoys for

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for their Baggage, and for the Sick and Wounded.

CAPONIERE is a Work sunk on the Glacis of a Place, about four or five Foot deep: the Earth that comes out of it serves to form a Parapet of two or three Foot in Height, made with Loop-Holes, or small Embrasures; it is covered with strong Planks, on which are laid Clays or Hurdles, which support the Earth that covers all; it holds about 15 or 20 Men, who fire through these Embrasures on the Besiegers; the Clays are made sometimes in the bottom of a dry Moat.

CAPTAIN in Field Regiments is he who commands a Troop or Company; he ought to be vigilant to keep his Company full of young lusty Soldiers, to know their Names, Dispositions, and Qualifications; to visit their Tents and Lodgings, to see what is wanting to pay them well. He has Power in his own Company of making Serjeants, Corporals and Lanspesades; he marches at the head of his Company, and ranks according to the Seniority of his Commission.

Captain-Lieutenant, is he who commands the *Colonel's* Troop or Company.

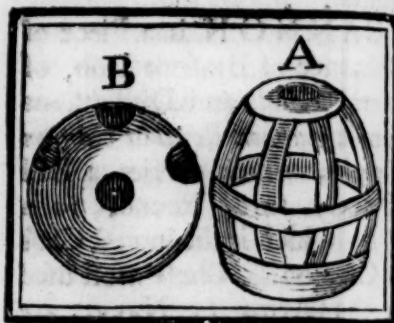
CARABINE is a Fire Arm, shorter than a Firelock, and it carries a Ball of 24 in the

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Pound; they are carried by the Light Horse, hanging at a Belt over the left Shoulder.

CARABINEERS are Regiments of Light Horse, carrying longer Carabines than the others, and are used sometimes on Foot.

CARCASS, A, is an Invention of an oval Form



made of Iron Ribs, and filled with a Composition of Meal-Powder, Saltpetre, Sulphur, broken Glafs, Shavings of Horn, Pitch, Turpentine, Tallow, and Linseed Oil, and then covered with a pitch'd Cloth; it is primed with Meal-Powder and Quickmatch, and fired out of a Mortar; its Design is to set Houses on Fire. It is lifted into the Mortar, by two small Cords fixed to its Sides. There is another sort for the Sea Service, which differs nothing from a Bomb, except its being filled with a Composition as before, and having five Holes all primed with Powder and Quickmatch, which takes

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Fire from the Flash of the Mortar, and having fired the Composition, it burns violently from those Holes, *Letter B.*

CARTOUCH is a Case of Wood about three Inches thick at bottom, girt round with Marlin, holding about 400 Musquet Balls, besides six or eight Balls of Iron of a Pound weight; 'tis fired out of a Hobbit, a small sort of Mortar, and is very proper for defending a Pass. A new sort has since been made, much better than the former, of a globular Form, and filled with Ball of a Pound Weight; others were then made for the Guns, being of Ball of half or quarter Pound Weight, according to the Nature of the Gun, tied in form of a Bunch of Grapes on a Tompion of Wood, and coated over; these were made in the room of the Partridge Shot formerly used, and exceed them very far.

CARTRIDGE is a Case of Pastboard or Parchment, containing the exact Charge of a Fire Arm; those for Musquets, Carabins or Pistols, hold both the Powder and Ball for the Charge.

Cartridge-Box is a Case of Wood, or turn'd Iron covered with Leather, holding a dozen Musquet Cartridges; it is wore upon a Belt, and hangs a little

CAV

higher than the right Pocket-Hole.

CASCABEL is the Knob of Metal behind the Breech of a Cannon; the Diameter of it is the Diameter of the Bore of the Piece; the Neck of the Cascabel, is what joins it to the Breech Mouldings.

CAVALIER is a great Mass of Earth of different Shapes, some round, and others long Squares, usually situated in the Gorge of a Bastion. (Those raised on the Curtin, are rather *Platforms*) They are bordered with a Parapet cut into Embrasures for four, six or eight Cannon, according to the Capacity of the Cavalier: They are a double Defence for the Faces of the opposite Bastion; they defend the Foss, break the Besiegers Galleries, command the Traverses in dry Moats, scowre the saliant Angle of the Counterscarp, where the Besiegers have their Counter-Batteries, and enfilade the Enemies Trenches, or oblige them to multiply their Parallels; they are likewise of great Use in defending the Breach and Retrenchments of the Besieged, and may greatly incommode the Retrenchments made by the Enemy, when lodged in the Bastion.

CAVALRY are the Regiments of Horse that serve in the

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the Army, and are divided into Brigades, as the Infantry, and encamp on the Wings of the Army.

CAVIN is a natural Hollow, fit to lodge a Body of Troops: If there happen to be any near a Place besieged, they are of great Use to the Besiegers; for they enable them to open the Trenches, make Places of Arms, or keep Guards of Horse, without being in Danger of the Enemies Shot.

CAZEMATE is a retired Platform in the Flank of a Bastion, for the Defence of the Moat and Face of the opposite Bastion; there are sometimes three such Platforms behind one another, the uppermost of which is on the Terre-Plain of the Bastion, which gives the Denomination of *Places Bases*, or *low Places* to the other two. They are covered from the Enemies Batteries, by a Work of Earth added to the Angle of the Shoulder, of a circular, or sometimes of a square Form, called *Shoulder*, *Oreillon*, or *Epaulment*.

CAZERNS or *Baracks*, are Lodgings built in Garrison Towns for the Garrison; near the Rampart, or in the waste Places of the Town.

CENTRE is the middle Point of the Circle; *Centre of a*

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Battalion, are the Pikes; *Centre of an Army*, is the Infantry.

CENTINEL is a private Man in a Company of Foot, armed with a Sword, Firelock, Bagonet, Bandeleers, and Cartridge-Box.

CESSATION of Arms, is when a Governour of a Place besieged, finding himself reduced to such an Extremity, that he must either surrender or sacrifice himself, his Garrison, and the Inhabitants, to the Enemy's Mercy, plants a *White Flag* on the Breach, or beats the *Chamade* to capitulate, at which both Parties cease all Acts of Hostility; till the Proposals be either agreed to or rejected.

Chain-Shot, see *Shot*.

CHAMADE is a Signal made by Beat of Drum for a Conference with the Enemy, when any thing is to be proposed.

CHAMBER of a *Mortar*, is that part of the Chace where the Powder lies, and is much narrower than the rest of the Cylinder; it is of different Forms; some are like a reversed Cone or Sugar-Loaf, others Globular, with a Neck for its Communication with the Cylinder, and are called *Bottled Chambers*, but the most ordinary are in Form of a Cylinder. *The Powder-Chamber*

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or *Bomb Chamber* on a Battery, is a Place sunk under Ground, for holding the Powder or the Bombs, where they may be out of Danger, and preserved from Rain.

Chamber of a Mine, is the Place in which the Powder is confined, and is generally of a cubical Form, see *Mine*.

CHANDELEER is a wooden Frame of large



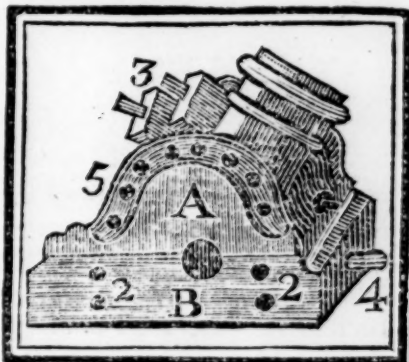
Planks, 6 or 7 Foot asunder, but parallel; on each of which is raised two Pieces of Wood perpendicularly, A, B, between which are laid Fascines, as C, which form a Parapet; they are made to move from Place to Place as occasion requires, and serve to cover the Workmen.

CHARG'D-CYLINDER, is that part of the *Chace* of a Gun, where the Powder and Ball are contain'd.

CHAUSSÉ-TRAPES, see *Crow-Feet*.

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Cheeks of a Mortar, or *Brackets*, are made of strong Planks

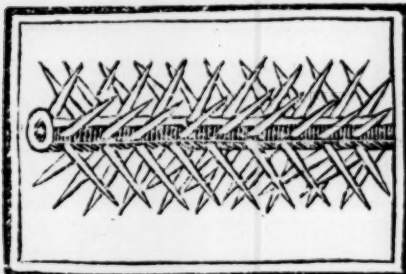


of Wood, of near a semi-circular Form, bound with thick Iron Plates A, and are fixed to the Bed B, by four Bolts, called *Bed-Bolts*. Figure 2, they rise on each side of the Mortar, and serve to keep it at any given Elevation, by the help of strong Bolts of Iron as 5, which go through both *Cheeks*, under and behind the *Mortar*, between which are drove *Coins* of Wood, as 3; these Bolts are called the *Bracket-Bolts*, and the Bolts which are put one in each End of the Bed, as 4, are the *Traverse Bolts*, because with Hand Spikes the Mortar is traversed by these to the Right or Left.

CHEVAUX DE FRISE, or *Turn-Pikes*, are Spars of Wood about a foot Diameter, and ten or twelve long, cut into

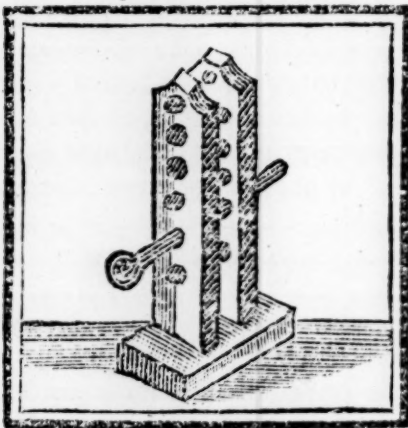
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into six *Faces*, and bored through; each Hole is arm'd with a short Spike shod with



Iron at each End, about an Inch Diameter, six Foot long, and six Inches from one another; so that it points out every way, and is proper for stopping small *Overtures*, or to be placed in Breaches; they are likewise a very good Defence against the Horse.

CHEVRETTE; among the many Inventions for rais-



ing of *Guns* or *Mortars* into their *Carriages*, this Engine is very useful; it is made of two pieces of Wood about four Foot long, standing upright upon a

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third, which is square; they are about a Foot asunder, and parallel; and are pierced with Holes exactly opposite to one another, having a Bolt of Iron, which being put through these Holes higher or lower at Pleasure, serves with a Hand-Spike, which takes its Poise over this Bolt, to raise any thing by Force.

Arch of a Circle is an undetermined part of the Circumference of a *Circle*, being sometimes larger, and sometimes smaller.

CIRCUMVALLATION is a Trench with a Parapet form'd by the Besiegers round their *Camp*, when they are apprehensive of the Enemy's Attempting to relieve the Place, or raise the Siege. The Engineers having made a Plan of the Country about, and agreed which way to run their Line to the best Advantage, always avoiding the Foot of rising Grounds, which the Enemy being Masters of, may command within the Trenches; they mark it out with Picquets and Ropes, making the Foss about 12 Foot wide, and the Base of the Parapet eight, the inside height of the Parapet side being six Foot, and the outside 5, with a Banquet of three Foot wide, and one and a half high. The *Lines of Contravallation*

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ought to have the same height and breadth, and both the one and the other should be strengthened with Forts and Redoubts, and well flanked.

CITTADEL is a Place fortified with 4, 5, or 6 *Bastions* commanding a Town; its being fortified with *Bastions*, distinguishes it from a *Castle*, which hath only round or square Towers. They are sometimes built half within and half without the Rampart of the Town, to the End the Governour of the *Cittadel* may be Master of an Entry into the Town, and likewise to the Country, without depending on the Inhabitants. Others are built without the Town, but for pressing Reasons, such as keeping Possession of a high Ground, which the Besiegers might use, either to batter the Town, cover their Camp, or preserve Marshes or Springs of Water, which may be useful to the Inhabitants, because their chief Design is to keep the Inhabitants in Subjection, and to hinder their corresponding with the Enemy, which cannot be done, if built at a Distance from the Town.

CLAYES, see *Hurdles*.

CLOY Guns. see to *Nail*.

COFFER is a Work sunk in the Bottom of a dry Moat, about six or seven Foot wide,

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the Length of it being from one Side of the Moat to the other, with a Parapet of about two Foot high, full of Loop-holes, covered over-head with Joys, Hurdles and Earth; they serve to fire on the Besiegers, when they endeavour to pass the Moat, and differ from the Caponiere, because it is longer; for the Caponiere takes not the whole Breadth of the Moat; it differs likewise from the Traverse and the Gallery, because it is made by the Belieged, and these by the Besiegers.

COLONEL, is the *Commander in Chief* of a Regiment, whether Horse, Foot or Dragoons, he may lay an Officer of his Regiment in Arrest, but must acquaint the *General* with it. A *Colonel* is not allowed a Guard, but only a Centry from the Quarter Guard.

COLOURS are large silk Flags fix'd on half Pikes, and carried by the Ensigns: When a Battalion is encamped, they are struck before its Front, but if the Battalion be in Garrison, they are lodged with the *Colonel* or commanding Officer; they are never carried on Detachments, nor with the Battalion when it mounts the Trenches. *Field Colours* are small Flags, about a Foot and a half square, carried with the

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Quarter-Master-General, for marking out the Ground for the Squadrons and Battalions.

Colour-Guard, see *Guard*.

COLUMN of an Army on a March, is a long row of Troops or Baggage following one another; the first and second Lines of the Army, as they are encamped, make generally two Columns on a March, filing off either from the Right or Left; sometimes the Army marches in four, six, or eight Columns, as the Ground will allow, and each Column is led by a General Officer.

COMMANDING Ground is a rising Ground, overlooking a Post.

COMMISSARY of the *Musters*, is an Officer appointed to muster the Army as often as the General pleases, to know the Strength of each Regiment, and Company, to receive and inspect the Muster Rolls; and to keep an exact State of the Army's Strength.

Commissary of Stores, is an Officer in the Artillery, who has the Charge of all the Stores, for which he is accountable to the Office of Ordnance; he is allowed an Assistant, Clerks and Conductors under him.

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Commissary of Horses, is an Officer in the Artillery, who has the Inspection of the Artillery Horses, sees them mustered, and sends such Orders as he received from the commanding Officer of the Artillery, by some of the Conductors of Horses, of which he has as a certain Number for his Assistants.

Commissary of Provisions, is he who has the Inspection of the Bread and Provisions of the Army.

COMMUNICATION, Lines of Communication are Trenches made to preserve a safe Correspondence betwixt two Forts or Posts, or at a Siege betwixt two Approaches, that they may relieve one another upon occasion, it is the same with *Boyaux*.

Bridge of Communication, see *Bridge*.

COMPANY is a small Body of Foot commanded by a Captain, who has under him a Lieutenant and Ensign; it usually consists of 50 Centinels, 3 Serjeants, 3 Corporals, and 2 Drums. A Company in the Guards is of 80 private Men. A Battalion of Foot consists of 13 Companies, one of which is always Grenadiers: The Eldest Company take their Post next the Grenadiers, who have always the Right of the Battalion,

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talion, and the second *Company* of the Left; the youngest has its Post always in the Center.

COMPLEMENT of a *Curtin*, is that part of it which makes the Demigorge.

Complement of the Line of Defence is the remainder of the *Line of Defence*, after the Angle of the Flank is taken off.

COMPTROLLER of the *Artillery*, inspects the Musters of the *Artillery*, makes the Pay-List, takes the Accompts and Remains of Stores, and is accountable to the Office of Ordnance.

CONDUCTORS are assistants to the Commissary of the Stores, to receive or deliver out Stores to the Army, to attend the Magazines by Turns, when in Garrison, and to look after the *Ammunition Waggon*s in the Field; they bring their Accounts every Night to the Commissary, and are immediately under his Command.

CONTRAVALLATION, a *Trench* with a *Parapet*, to cover the Besiegers themselves with, next the Place besieged, to defend them from the Salies of the Garrison, so that the Army forming a Siege, lies betwixt the *Lines of Circumvallation* and *Contravallation*; when the Enemy has no Army

CON

in the Field, there is no occasion for the *Lines of Circumvallation*; and when the Garrison is weak, the *Lines of Contravallation* are seldom used.

CONTRIBUTION, Imposition or Tax paid by *Frontier Countries*, to redeem themselves from being plundered and destroyed by the Enemy.

CONVERSION is a Military Motion, which turns the Front of a Battalion where the Flank was; if the Battalion be attacked in the Flank.

CONVOY is a Supply of Men, Money, Ammunition or Provisions, convey'd into a Town, or to an Army. The Body of Men likewise, who guard this Supply, are called a *Convoy*.

CORDON is a Stone jutting out betwixt the Rampart and the Basis of the Parapet, it runs quite round the Fortification.

CORIDOR, a *French* Word for *Covert-Way*.

CORNET, is the third *Commission Officer* in a Troop of Horse or Dragoons; he commands in the *Lieutenant's* absence; his principal Duty is to carry the Standard near the middle of the first Rank of the Squadron.

CORPORAL, an *inferior Officer*

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Officer of Foot under a *Serjeant*; he receives the Word from the Rounds that pass by the *Grand Guard*; and from such as are stopt by his *Centries*, with his Sword drawn; he relieves the *Centries*; and when the *Guard* is relieved, gives the Orders he had to the *Corporal* who is to mount, and shows him all the Posts; he carries a *Fuser*.

CORPS DE GARDE, see *Guard*.

COVERT WAY, a Tract of Ground level with the Field, about 3 or 4 Fathoms wide, covered by a *Parapet*, which is carried round the Place; this *Parapet* slopes insensibly towards the *Campaign*, and the *Talus* or Sloping, is called the *Glacis*, which the *Besiegers* are generally obliged to sap through, to make a Lodgment. The *Parapet* of the *Covert Way* is about six Foot high, with a Banquet, and forms a *Saliant Angle*, before the *Curtin*, which serves for a Place of Arms.

COUNCIL OF WAR, is when the General of an Army calls together his *Lieutenant* and *Major Generals* for their Advice upon some Affair of Importance; he hears all their Reasons, and determines by Majority of Votes.

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COUNTER-APPROACHES, Lines and Trenches made by the *Besiegers*, when they come to attack the Works of the *Besiegers*, or prevent their Approaches. *Counter-Battery* is a Battery raised to play upon another, to dismount the Guns.

Counter-Guard is a Work raised before the Point of a Bastion, composed of two long Faces, parallel to the Faces of the Bastion, making a *Saliant Angle*; they are sometimes of other Shapes, and Situations.

Counter-March, is an Army's sudden Marching contrary way; and may be caused by the Enemy's endeavouring to get betwixt them and their Garrisons, or may be done to disappoint and amuse the Enemy. A Battalion is said to counter-march, when being charged in the Rear, they change the Front by marching those which are in the Front, or the *File-Leaders* to the Rear, in the Place of the *Bringers up*. Ranks are said to Counter-march, when the Wings of a Battalion interchange Ground.

Counter-mine is used, when the *Besiegers* have passed the Foss, and put the Miner to the Foot of the Rampart: They

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are of two Kinds, being either made when the Bastion is raised, or afterwards, when it is attacked. The former are carried quite round the Faces of a Bastion; their Height is from 4 to 5 Foot, and broad enough for a Man to pass easily. The others are Pits sunk deep in the Ground where the Miner is supposed to be, from whence they run out Branches in search of the Enemy's Mine, to frustrate the Effects of it, by either taking away the Powder, or cutting the Train.

Counterescarp is properly the exterior Talus or Slope of the Ditch, but it is often taken for the *Covert Way* and the *Glacis*. The Enemy in this Sense are said to have attacked the Counterescarp, or lodged themselves on the Counterescarp.

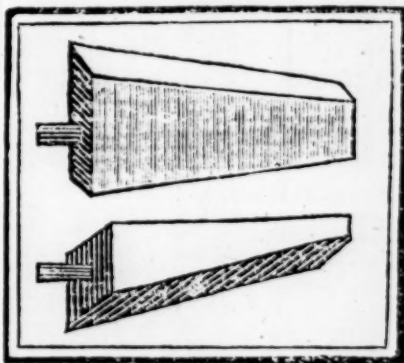
Counter-Trenches, see *Counter-Approaches*.

COURT-MARTIAL is called by a *General* to try Offenders; it is composed of a *President* named by the *General*, and of 12 Members, and a *Judge Advocate*, who take an Oath to render Justice to the best of their Knowledge; the Sentence after being approved by the *General*, is Executed by the *Provost-Marshal* of the Army.

COINS are Wedges of Wood used under the Breech

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of a Gun, by which a *Gunner* raises or falls the Muzzle of his



Piece, till he points it exactly at the Object: Each Gun has three Coins.

CRAB, see *Gin*.

CRIC, see *Jack*.

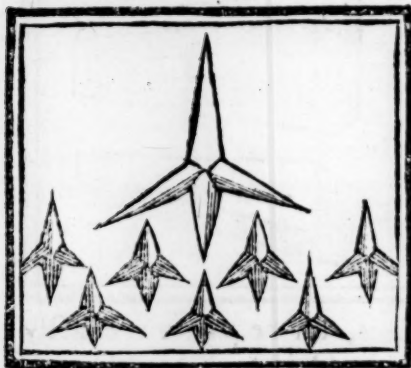
CROATS, A Regiment in France so called, because originally composed of *Croatians*. They are commanded upon all desperate Service.

CROWN-WORK is an Out-Work that takes up the most Ground, and is made with a very large Gorge, generally the Length of the Curtin of the Place, and two long Sides, terminating toward the Country, in two Demi-bastions, each of which is joined by a particular Curtin, to a whole Bastion, which is the Head of the Work; these Works are always raised to inclose a rising Ground, or cover the Head of a Retrenchment.

CROW-FEET, *Chausse-Traps*,
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Traps, or *Caltrops*, are Iron Machines, having four Points, about 3 or four Inches long, so made that which ever way



fall, there is still a Point up; they are to be thrown upon Breaches, or in Passes where Cavalry are to march, to whom they are very troublesome, by running into the Horses Feet and laming them.

CUIRASSIERS are Cavalry armed with Back, Breast, and Head-Piece, as most of the *Germans* are; we have had no *Cuirassiers* in the *English* Army, since the last Revolution.

CULVERIN is a Cannon about 5 Inches and a quarter Diameter in the Bore, and from 9 to 12 Foot long, carrying a Ball of 18 Pound; it is a good battering Gun, but is too heavy for a Field-Piece.

CURTIN is that part of the Rampart of a Place which is betwixt the Flanks of two Bastions, and is the best defen-

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ded of any part of the Rampart, wherefore Besiegers never make their Attacks on the Curtins, but on the Faces of the Bastions, because of their being defended but by one Flank.

CUNNETTE or *Cuvette*, is a deep Trench about three or four Fathom wide, sunk along the middle of a dry Moat, to make the Passage more difficult to the Enemy; it is generally sunk so deep, till they find Water to fill it, and is good to prevent the Besiegers Mining.

CYLINDER or *Chase* of a Gun, is the Bore or Concavity of a Piece, whereof that part which receives the Powder and Ball, is called the *Charged Cylinder*, and that which remains empty after the Gun is charged, is called the *Vacant Cylinder*.

D

DECAGON is a Figure of ten Sides or Polygons, forming ten Angles, each of which may be fortify'd with a Bastion.

DEFENCE of a Place. All those parts of a Fortification, which flank and defend the rest, as the Flanks, Cazemates, Parapets, and Faussebrays. The Face of a Bastion, tho' the simplest Defence of any,

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any, yet it cannot be stormed, till the opposite Flank be ruined.

Defence, Line of Defence, see Line.

DEFILE is a narrow Pass, where Troops cannot march, but by making a small Front, and must therefore file off, which gives an enemy an advantageous Opportunity of either attacking the Front or Rear, since the Straitness of the Passage prevents them from relieving one another.

To Defile, is to reduce an Army to a small Front, to march through such a narrow Passage.

DEMIBASTION, see *Bastion*.

Demi-Cannon is a Gun carrying a Ball of 32 pound weight, the Diameter of its Bore is 6 Inches and a half, and its Length from 12 to 14 Foot.

Demi-Culverin is a Cannon of about 9 Foot long, the Diameter of the Bore is 4 Inches and a Quarter, carrying a Ball of 9 Pound weight; it is a very good Field Piece, takes 13 Horse to draw it, and two Gunners, and 4 *Matrosses* to serve it.

Demi-Gorge is that part of the Polygon which remains after the Flank is raised, and goes from the Curtin to the Angle of the Polygon; it is

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half of the vacant Space or Entrance into a Bastion.

DESCENT into a Moat is a deep Trench or Sap through the Esplanade, and under the Covert way, covered overhead with *Planks* and *Hurdles*, and Earth against Artificial Fires, to secure the Descent, which in Ditches that are full of Water, is made to the Brink of the Water, but in dry Moats the Sap is carried to the bottom of the Moat, where Traverses are made to lodge and cover the Besiegers, or secure the Miner.

Detachment, a Number of Men drawn out of one or more greater Bodies, to be employed as the *General* pleases, whether on an Attack at a Siege, or in Parties, to scour the Country.

DISMOUNT the Enemy's *Cannon*, is to break their Carriages, their *Wheels*, *Axletrees*, or any thing else, so as to render them useless.

Dismount, is likewise a Command to the *Dragoons* to alight or unhorse.

DISPART of a Gun, is the Difference in the thickness of Metal between the *Base* and *Muzzle-Ring*, and is found thus; take with a pair of *Caliber Compasses*, the Diameter of these two Rings; suppose of an *English Demiculverin*, the Dia-

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Diameter of the Base may be about 14 Inches, and that of the Muzzle about 11; the Difference then is three, half of which is one and a half, which is the Difference of the Thickness of Metal at these two Places: The *Dispart* is a piece of Stick of this Length, set on the *Muzzle Ring*, which makes a visual Ray or Line drawn from the *Base Ring* to the top of the Stick, an exact Parallel to the *Axis* of the *Concave Cylinder*, or to the Soul of the Piece, and serves to direct the Gunner's Eye in leveling his Gun at an Object.

DIVISIONS of a *Battalion* are the several Parcels into which a *Battalion* is divided in marching; the *Lieutenants* and *Ensigns* march before the *Divisions*.

The Divisions of an Army, are the *Brigades*.

DODECAGON is a Figure that has twelve Sides, and as many *Angles*, capable of being fortified with the same Number of *Bastions*.

DONJOHN is a Place of Retreat, to capitulate with more Advantage, in case of Necessity.

DOUBLE-TENAILLE, see *Tenaille*.

To Double, is to put two Ranks or two Files into one; *doubling of the Ranks*, is, when

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the second, fourth, and sixth *Ranks* march into the first, third and fifth; so that the six *Ranks* are reduced to three, and the *Intervals* betwixt the *Ranks* become double what they were before; but, *to double by half Files*, is when the fourth, fifth and sixth *Ranks* march up to double the first, second and third, or the contrary. *To double the Files to the Right*, is when every other *File* faces to the Right, and marches into the next *File* to it; so that the six *Ranks* are turned into 12, and each *File* is 12 deep. *To double the Files to the Left*, is when every other *File* faces to the Left, and marches into the next; in doubling the *Files*, the Distance betwixt the *Files* becomes double.

DRAGOONS, Musqueteers mounted, who serve sometimes on Foot, and sometimes on Horseback, as Occasion requires: They are divided into *Brigades*, as the *Cavalry*, and each Regiment into *Troops*, each Troop having a *Captain*, *Lieutenant*, *Cornet*, *Quarter-Master*, two *Serjeants*, three *Corporals*, and two *Drums*; some Regiments have *Hautboyes*; in a Battle or upon Attacks they are commonly the Forlorn Hope, being the first that fall on. They encamp generally on the Wings of

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of the Army, or at the Passes leading to the Camp, and sometimes they cover the *General's Quarters*; they do Duty on the *Generals* of Horse and Dragoons, and march in the Front and Rear of the Army. They have Cornets like the Horse, and Serjeants like the Foot, but are look'd upon as Foot.

DRAW-BRIDGE, see *Bridge*.

DRUM, is beat as the several Occasions require: As *to beat the General*, is a Signal for the Army to make ready to march; *The Assembly* is the next Beat, which is an Order for the Soldiers to repair to their *Colours*; and *the March*, is to command them to move. *To beat the Retreat*, is for the Army to keep to their Tents, and not to fire till next morning, for fear of alarming the Camp; this is about Sun-set, at the firing of a Gun called the *Warning-Piece*, after which the *Centries* challenge, and the *Picquet-Guard* is relieved. *The Reveille* is beat at break of Day, to warn the Soldiers to rise, and the *Centries* to forbear challenging. *The Alarm* is to call the Soldiers to Arms, on notice of some sudden Danger. *To beat a Parley or Chalmade*, is to desire a Conference with the Enemy. *To beat a*

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Call, is to advertise the Soldiers to stand to their Arms, when a *General Officer* is passing by.

DUTY, is the exercise of those Functions that belong to a Soldier; with this Distinction, that *Mounting Guards*, and the like, where there is not an Enemy directly to be engaged, is called *Duty*; but their marching to meet and fight an Enemy, is called *Going upon Service*.

E.

ECHARPE, *To batter en Echarpe*, is to batter obliquely or side-ways.

Embrasures, are the Cuts made through the Parapet of a *Battery* for the Muzzles of the Guns, and for the Passage of the Shot. When a *Battery* is brought on the *Glacis* of a Place, there are thick Planks of Wood Musquet-proof, to stop the *Embrasures*, as soon as the Gun is fired, to save the *Gunners* and *Matrosses* that are employed about the Guns, from the small Shot, which plays continually upon them from the Besieged. See *Battery*.

EMPATEMENT, see *Talus*.

ENCIENTE is the Wall
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or Rampart, which surrounds a Place, sometimes composed of *Bastions* and *Curtins*, either faced with Brick or Stone, or only made of Earth. The *Enciente* is sometimes only flanked by round or square Towers, which is called a *Roman Wall*.

ENFANS-PERDUS, see *Forlorn Hope*.

ENFILADE; to *Enfilade*, is to be Masters of a Ground from whence a Post or an Enemy is flanked, so that it may be battered all along a Right Line. In conducting the *Approaches* at a Siege, Care must be had that they be not enfiladed from any Work of the Place, but that they be carried on with Windings and Turnings, till they are brought to the *Glacis*, and then they are carried straight forwards, being sunk deep in the Ground, and covered over-head.

ENNEAGON, is a *Figure* or *Polygon* of nine Sides, and as many *Angles*, each capable of being fortified with a *Bastion*.

ENSIGN, is the Officer who carries the *Colours*, and is the lowest commission'd Officer in a *Company* of *Foot*, subordinate to the *Captain* and *Lieutenant*; he is to carry the *Colours* both in Assault, or Day of Battle, and should not quit them but with his Life.

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ENVELOPE is a Work of Earth raised sometimes in the *Ditch* of a Place, sometimes in form of a simple *Parapet*, and at other Times like a small *Rampart* with a *Parapet*. *Envelopes* are often made to inclose a weak Ground, when it is to be done with simple Lines, to shun the great Charge of *Hornworks*, *Tenails*, or the like, or when they have not Ground for such large Works. Some give the Names of *Sillon*, *Counter-Guard* and *Conserve*, to such *Envelopes* as are made in the Moat; sometimes they are called *Lunettes*. See *Lunette* and *Sillon*.

EPAULE, or *Shoulder* of a *Bastion*, is the Place where the *Face* and *Flank* meet, and form the *Angle* called the *Angle of the Shoulder*.

EPAULMENT, is a Work raised either of Earth, *Gabions* or *Fascines*, loaded with Earth to cover Side Ways. The *Epaulements* of the Places of *Arms* for the *Cavalry* at the entering of the *Trenches*, are generally of *Fascines* mixed with Earth.

Epaulement, or *Square Orillon*, is a Mass of Earth, near a square Figure, faced with a Wall to cover the Cannon of a *Cazemate*.

EPTAGON, or *Heptagon*, is a Figure of seven Sides and

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and seven *Angles*, capable of being fortified with seven *Bastions*.

ESPLANADE, is the sloping of the *Parapet* of the *Covert-Way* towards the *Campaign*; it is the same with *Glacis*, but begins to be antiquated, and is more properly the empty Space betwixt the *Glacis* of a *Citadel*, and the first Houses of a *Town*.

ESTOILE, see *Star-Re-doubt*.

ETAPPE, an Allowance of Provisions and Forrage to an Army in their March through a Kingdom, to or from Winter Quarters.

ETAPPIER, that contracts with a Country or Territory, for furnishing *Troops* in their March with Provisions and Forrage.

EVOLUTION, the Motion made by a Body of *Troops*, when obliged to change their Posture in order to preserve a Post, or possess another, to attack an Enemy with more Advantage, or to be in a Condition of defending themselves the better; and consists in *Doublings*, *Counter-Marches*, *Wheelings*, &c.

EXAGON, is a Figure bounded by six *Sides* or *Polygons*, making as many *Angles* capable of *Bastions*.

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FACE of a Bastion. The two foremost Sides reaching from the Flanks to the Point of the Bastion, where they meet. They are the weakest parts of a Fortification, being the least flanked. The Breach therefore is generally made there; for the opposite *Flank* being ruined, which should defend the Passage of the Moat, the Besiegers meet with less Opposition than they could expect in attacking any other part of the Rampart which is better flanked.

Face of a Place, called also *The Tenaille*, is the Front comprehended between the flanked *Angles* of two neighbouring *Bastions*, containing the *Curtin*, the two *Flanks*, and the two *Faces* of the *Bastions* that look upon one another. In a Siege the Attacks are carried against both *Bastions*, when the whole *Tenaille* is attacked.

Face Prolong'd, is that part of the *Line of Defence Razant*, which is betwixt the *Angle* of the *Shoulder* and the *Curtin*, or the *Line of Defence Razant*, diminished by the Face of the Bastion.

Face is likewise a Word of Command; as *Face to the Right*,

F A S

right, is to turn upon the left Heel a Quarter round to the Right. *Face to the Left*, is to turn upon the Right Heel a Quarter round to the Left.

Face of a Gun, is the Superfices of the Metal at the Extremity of the Muzzle of the Piece.

FAGGOTS, the *French* call them *Passevolans*, are Men hired by Officers, whose Companies are not full, to muster, and cheat the Sovereign of so many Men's Pay.

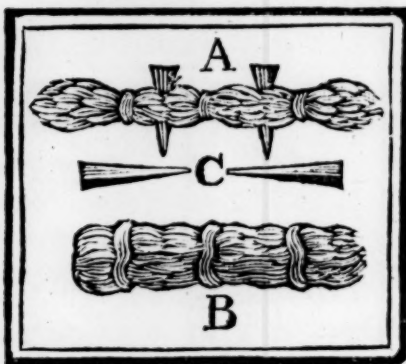
FALCON and *Falconette*, are small Guns; the first about two inches three Quarters Diameter of the Bore, and the other two Inches; they are too small to be of Use in the Field with an Army, and are now out of Use.

FALSE Alarm, see *Alarm*.

False Attack, see *Attack*.

FANIONS, are small Flags carried along with the Baggage. See *Flags*.

FASCINES, are Faggots



F A S

of small Wood, of about a Foot Diameter, and six Foot long A, bound in the Middle, and at both Ends; they are brought by the *Cavalry* to the Entrance of the *Trenches*, from whence the Workmen carry them, to raise *Batteries* or other Works, to make *Chandelers*, *Epaulments*, or to fill up the *Moat* to facilitate the Passage to the Foot of the Wall; they are likewise used in making the Sap or Descent into the Ditch, in making *Caponeers* and *Coffers*, and many other things; and being used so, are covered over with Earth or Raw Hides, to prevent their being set on Fire. They are used in fortifying a Place, especially where the Earth is bad, to bind the *Rampart*, where they are laid athwart-ways, and drove down with Stakes C, with a Bed of Earth above them, the *Fascines* again and Earth again, till the *Rampart* be finished; or to keep up the Earth of the *Parapet*, and then they're laid length-ways, and drove fast with Stakes of three or four Foot long. There are shorter *Fascines* or *Bavins*, about a Foot and a half long, which being pitched over, are to be thrown upon a Gallery, or other Work of the Enemy, to set it on Fire. *Fascines* differ

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fer from *Saucissons*, the former being made of small Wood, and the latter of Branches of Trees B. *Fascines* are sometimes ordered to be made by the *Cavalry*, before a March over bad Ground, and are carried by them, each *Trooper* having one to mend the Ways.

FAUSEBRAYE, is a small *Rampart* about 3 or 4 Fathom wide, bordered with a *Parapet* and *Banquett*, the Design of it is to defend a *Foss*; they are not reckoned so useful where there is a dry Moat, because the *Besiegers* may make better Works for the Defence of it, than *Fausebrayes*, such as *Traverses*, *Sillons*, and *Coffers*. But in Places surrounded with a wet Ditch, they may be more useful, provided they be made only before the *Curtin* and *Flanks*, for lying low, they cannot be easily hurt by the *Enemies Cannon*, and defend the *Foss* better, because of their low Situation, than the *Rampart*, which, because of its Height, cannot so well discover the *Foss*. They ought never to be made before the *Faces*, especially in Places faced with Brick or Stone, because the *Breach* being generally made in the *Face*, the Ruins and Rubbish of the *Rampart* are stopped in the *Fausebray*, which facili-

FIL

tates the Ascent of the *Breach*; and in Places lined with Brick or Stone, the Pieces of Stone or Brick fly among the *Soldiers* in the *Fausebray*.

FICHANT, *Line of Defence Fichant*, see *Line*.

FIELD-OFFICERS, are those who have Command over a whole *Regiment*, such are the *Colonel*, *Lieutenant Colonel* and *Major*, but such whose Commands reach no further than a *Troop* or *Company*, are not *Field-Officers*. See *Officers*.

Field-Pieces, are small *Guns* proper to be carried along with the Army into the Field, such as 3 *Pounders*, *Minions*, *Sakers*, 6 *Pounders*, *Demi Culverins*, and 12 *Pounders*, which, because of their smallness, are easier drawn, are a less Charge, require lesser Quantities of Ammunition, and are easier served.

Field-Staff, is a Weapon carried by the *Gunners*, about the length of a *Halbert*, with a Spear at the end, having on each side Ears screwed on, like the Cock of a *Match-Lock*, where the *Gunners* screw in lighted Matches when they are upon Command; and then the *Field-Staffs* are said to be armed.

FILE, is the Line of *Soldiers* standing one behind another, which is the Depth of the *Battalion* or *Squadron*. The
Files

FIR

Files of a *Battalion* of Foot, are generally six deep, and those of a *Squadron* of Horse three. The *Files* must be streight, and parallel one to another; to *double the Files*, is to put two *Files* into one, which makes the Depth of the *Battalion* double of what it was in Number of Men. The *File Leaders* are the foremost Men in each *File*; the *Bringers up* are the last Men of each *File*, or the last Rank of the *Battalion*; the *half File-Leaders*, are the fourth Rank, because the fourth, fifth and sixth Ranks are called the *Rear half Files*, as the first second and third are the *Front half Files*.

To *File off*, is the same as to *Defile*, or to file off from a large Front to march in length. An Army is said to file off from the Right or Left, when the *Squadrons* move from the Right or Left, marching one after another, and so reducing the two *Lines* or *Ranks* of the Army to two long *Files*. A *Battalion* is said to file off, when it marches by Divisions or Sub-Divisions.

FIRE, *Running Fire*, is when a Rank of Men drawn up, fire one after another, or when the *Lines* of an Army are drawn out to fire Victory, for which each *Squadron* and *Battalion* takes it from another,

FIR

from the Right of the first Line to the Left, and then from the Left to the Right of the second Line.

Fire-Ball, is a Composition of *Meal-Powder*, *Sulphur*,



Saltpetre, *Pitch*, &c. about the Bigness of a *Hand Grenade A*, coated over with Flax, and primed with a slow Composition of a Fuze, to be thrown into the Enemies Works in the Night time, to discover where they are; or to fire Houses, Galleries, or other Blinds of of the Besiegers; but they are then armed with Iron Pikes or Hooks, that they may not roll off, but stick where they are designed to have an Effect.

Fire-Lock, or *Fusil*, is a Fire Arm carried by a Foot Soldier; the Barrel of it is about three Foot eight Inches long, the Stock about four Foot and eight Inches, and the Bore is fit to receive a Bullet of Lead of an ounce Weight.

Fire-Master, is an Officer, who gives the Directions and Proportions of Ingredients for each

FLA

each Composition required in *Fireworks*. The chief *Fire-Master of England*, is a Post belonging to the Office of Ordnance.

Fire-Pots, are small Earthen Pots, into which is put a *Grenade* filled with Powder, and then the Pot is filled with fine Powder till the *Grenade* be covered, the Pot is afterwards covered with a piece of Parchment, and two pieces of Match across lighted; this Pot being thrown by a Handle of Match where it is design'd, it breaks and fires the Powder, and burns all that is near it, and likewise fires the Powder in the *Grenade*, which ought to have no Fusee, to the End its Operation may be the quicker. See the *Figure at Fire Ball B*.

Fire-Workers, are Officers subordinate to the *Firemasters*, but command the *Bombardeers*; they receive the Orders from the *Firemaster*, and not only see them executed, but work themselves along with the *Bombardeers*; there are twenty four *Fire-Works* established in the Office of Ordnance.

FLAGS, in *French Fanions*, are small Banners of Distinction stuck in the *Baggage-Waggons* of the Army, to distinguish the Baggage of one *Brigade* from another, and of one *Battalion* from another, that they may be

FLA

marshalled by the *Waggon-Master-General*, according to the Rank of their *Brigades*, where they are to keep, during the March, to avoid the Confusion that otherwise would be.

FLANK, is that part of the *Rampart*, which joins the *Face* and the *Curtin*, comprehended betwixt the *Angle* of the *Curtin* and the *Angle* of the *Shoulder*, and is the principal Defence of a Place; its Use is to defend the *Curtin*, the *Flank* and *Face* of the opposite *Bastion*; to defend the Passage of the Moat, batter the *Sailiant Angles* of the *Counterscarp* and *Glacis*, from whence the Besieged generally ruin the *Flanks* with their *Artillery*; for the *Flanks* are the Parts of a *Fortification*, which the Besiegers endeavour most to ruin, in order to take away the Defence of the Face of the opposite *Bastion*.

Flank-Oblique, or *Second Flank*, is that part of the *Curtin* from whence the Face of the opposite *Bastion* may be discovered. This appears in a Plan upon Paper, to be a good Defence, but is rejected by most *Engineers*, as no way useful for its being ruined at the beginning of a Siege, especially if it be of a sandy Earth; the second *Parapet*, which may be raised behind the former, is of no use, for it neither discovers nor de-

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sends the Face of the opposite *Bastion*, besides, it shortens the *Flank*, which is the true Defence, and the continual Fire of the Besiegers Cannon, will never suffer them to raise a second *Parapet*. This second *Flank* defends very obliquely the opposite Face, and is to be used only in a Place which is to be attacked by an Army without Cannon.

Flank retired, or *Low Flank*, is one of the *Platforms* of the *Cazemate*, and is sometimes called the *Cover'd Flank*. This is generally called the *Cazemate*, when there is only one *Platform* retired towards the Capital of the *Bastion*, and covered by an *Orillon*; these retired *Flanks* are a great Defence to the opposite *Bastion*, and to the Passage of the Moat, because the Besiegers cannot see, nor easily dismount their Guns.

Flanks of an Army, are the Troops encamped on the Right and Left. *Flanks of a Battalion*, are the Files on the Right and Left.

To Flank, is to attack and fire upon the Flank of an Enemy; it is a very common Term, and very essential in *Fortification*, for all Works that have only their Defence right forwards are deficient, and must have each place to flank another, and be flanked reciprocally, otherwise it is not in Perfection. The

FOR

Curtin is the strongest part of a *Fortification*, because it is flanked at both Ends by the *Flanks*, and the *Face* having but one Defence from the opposite *Flank*, is counted the weakest.

Flanked-Angle, see *Angle*.

FLYING-ARMY, see *Army*.

Flying-Bridge, see *Bridge*.

FOOT, are such as lift themselves under a *Captain*, to serve on Foot, and are armed with a *Sword*, *Bayonet*, *Fire-lock* or *Pike*, *Collar of Bandoleers*, *Cartridge-Box*, &c. The Foot are formed into *Companies*, and according to the Articles of War, a *Soldier* is not to leave his *Company*, without Leave from his Officer, to go about his own Business, without being reputed a *Deserter*, and tried for his Life. These *Companies* are formed into *Regiments*, called *Regiments of Foot*.

Foot, a *Regiment* is said to be on the same *Foot* with another, when it has the same Number of Men, and the same Pay.

Foot-Bank, is a small Step of Earth, on which the *Soldiers* stand to fire over the *Parapet*; there are generally two, and sometimes three, but the height of the *Parapet* from the uppermost *Foot-bank*, ought always to be four Foot and a half. See *Banquett*.

FORELAND, see *Liziere*.

FORGE,

FOR

FORGE, is an Engine carried along with the *Artillery* for the *Smiths*, and is a travelling *Smith's Forge*. *Forge for hot Balls*, is the Place where the Balls are made hot before they be fired off; it is built of Brick, and hath a Furnace below, over which are Bars of Iron; it is covered over-head, and the Balls laid upon the Bars till they be hot, and are taken out with long Ladles, to be put into the Gun. The Materials for such *Forges* are carried along with the *Artillery*, when there is any Design of burning Magazines, or the like, with hot Ball.

FORELORN-HOPE, in *French Enfants Perdus*, are Men detached from several *Regiments*, or otherwise appointed to make the first Attack in Day of Battle, or at a Siege, to be the first in storming the *Counter-scarp*, mounting the *Breach*, or the like. They are called so from the imminent Danger they are exposed to.

FORMERS are of several sorts, but the chief is for making *Cartridges* for *Cannon*; they are round Pieces of Wood fitted to the Diameter of the Bore of a Gun, on which the *Paper*, *Parchment*, or *Cotton*, which is to make the *Cartridge*, is rolled before it be sewed.

FORRAGE, is the *Hay*, *Oats*, *Barley*, *Wheat*, *Grass*,

FOR

Fitches, *Clover*, &c. which is cut down, and brought into the Camp by the *Troopers*, for the Subsistence of their Horses. *Dry Forrage*, is the *Hay*, *Oats* and *Straw*, which is delivered out from the Magazines, to the Army in Garrison, or when they take the Field before the *Forrage* be grown up.

FORT, is a Work invironed on all Sides with a *Moat*, *Rampart*, and *Parapet*; the Design of it is to secure some high Ground, or the Passage of a River, to make good an Advantageous Post, to fortify the Lines and Quarters of a Siege, &c. They are of different Figures, and are made smaller and greater, as the Ground requires; some are in the Shape of *Bastions*, some are fortified with entire *Bastions*, others with *Demi-Bastions*; some are raised on a Square, and others on a Pentagon. A *Fort* differs from a *Citadel*, because this last is always raised by the Orders of the Sovereign. Small Forts are made in form of a Star, having five or seven *Angles*, and are raised for the Security of the Lines of *Circumvallation*.

FORTIFICATION, is an Art by which a Place is put in a Posture of Defence, so that every one of its Parts defends, and is defended by another, and discovers the Enemy in *Front*

FOR

and *Flank*, opposing to an Enemy the Breadth and Depth of a *Foss*, and the Height and Solidity of the *Rampart*, so that a small Body of Men behind this Wall may be able to resist a great Army. *Fortification* is likewise taken for all the Works that serve to cover or defend a strong Place. It is also the Art by which an *Engineer* makes Plans and Designs, raises different sorts of Works, digs the *Foss*, faces the *Ramparts*, and conducts the *Approaches*, either in the Attack or Defence of a Place: In short, it requires an *Engineer* to be a good Designer, Architect, Miner and Mechanick, and to understand Gunnery.

Fortification Modern, is that which is flanked and defended by *Bastions* and *Out-Works*, and whose Works are so solid, that they are Proof against the Force of Cannon, and cannot be beat down, but by a perpetual Fire from several Batteries of Cannon.

Fortification Artificial, are the Works raised by an *Engineer*, to strengthen the natural Situation of a Place, by repairing and supplying its Defects; such as *Ravelines*, *Half-Moons*, *Horn-Redoubts*, &c. *Natural Fortification* consists in a Place's being strong by Nature.

Fortification Defensive, shews

FOU

a Governour how to make the best of the Garrison committed to his Care, and provide all things necessary for their Defence.

Fortification Regular, consists in the Place's being regularly fortified, the Sides of the *Polygon* not exceeding a Musquet Shot, and the *Angles* being equal; in its being defended by *Bastions* and other Works, whose relative Parts are equal and uniform. *Irregular Fortification*, is, when a Town has such an irregular Situation, as renders it incapable of being regularly fortified, both because of the Difference of its Sides, some being too long, others too short; as likewise because of its being surrounded with Precipices, Valleys, Ditches, Rivers, Hills, Rocks or Mountains, and must therefore be fortified with Works suitable to the Situation.

FOSS, see *Moat*.

FOUCADE, *Fougade*, or *Fougasse*, is a small *Mine* under a *Post*, to blow it up when it is in danger of falling into the Enemies Hands; it is made like a Well eight or ten Foot wide, and ten or twelve deep, charged with Barrels or Sacks of Powder, upon which Pieces of Wood are laid cross ways, with Stones and Earth, and whatever else can make a great De-

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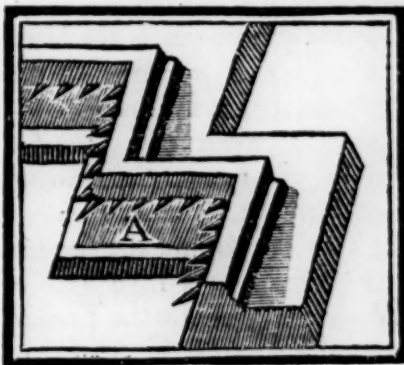
Deſtruction; this is fired by the help of a *Saucifs* or *Train*, which has a Communication with the *Counterſcarp*, or ſome other *Poſt*.

FOURNEAU, *Powder-Chamber*, or *Chamber of a Mine*, is a Hollow made under a Work to be blown up; the Top of it is ſometimes cut into ſeveral Points like Chimneys, to open more Paſſages for the Powder, that it may have its Effects on ſeveral Sides at the ſame time; and ſometimes it is in form of a hollow Cube, about five or ſix foot large: the Charge of a *Chamber* or *Fourneau* is about 1000 l. of Powder put into Sacks or Barrels, ſo that the *Saucifs* or *Puding* may fire them all at once. It is left to the Judgment of the Engineer or Miner to augment or diminifh the Quantity, as he thinks convenient, and to proportion it to the Nature of the Ground or Rock on which the Work is raiſed, which is to be blown up; for if a great deal of Powder meet with little Reſiſtance, it makes only a Hole, by raiſing the Earth above it with a great Violence. Sometimes they make four or five Chambers under a Work, and put but a ſmall Quantity of Powder in each, as 100 Pound or the like. A *Fourneau* ought not to be charged till it be ready

FRA

to ſpring, becauſe the Powder lying too long in the Humidity of the Earth, loſes its Force. When the Powder is put in Barrels, one of the Staves muſt be taken out, and a Quantity of Powder ſcattered round; if it be in Sacks, they muſt be ript, and Powder ſtrowed about, that they may fire all at once. The Mouth of the *Fourneau* is to be ſtopp'd with great Planks, and Pieces of Wood, and the Vacancy which is left, after the *Fourneau* is charged, muſt be filled with Stones and Pieces of Wood, and all the Turnings well ſtopp'd.

FRAISES are Pieces of Wood of ſix or ſeven Foot long, planted under the *Cordon*; and in Places which are faced with



Stone or Brick, they are planted at the Baſe of a *Parapet*, being let about half way into the *Rampart*; they are not laid parallel to the Baſe of the *Rampart*, but a little ſloping with their Points downwards, that

F U S

Men cannot stand on them; their chief use is to hinder the Garrison from deserting, which would be easy without them, especially in Places with dry Moats. They likewise prevent Surprizes and Escalades. See A in the Figure.

To fraise a Battalion, is to line it every way with *Pikes*, that it may stand the Shock of a Body of Horse.

FRONT of a Battalion is the first Rank, or the File-Leaders; it is likewise called the *Face* or *Head* of a *Battalion*. *Front of a Squadron* is the first Rank of Troopers. *Front of an Army* is the first Row of Tents in the first Line, which are the *Quarter-Masters* Tents in the Horse, and the Serjeants in the Foot.

Front of a Place, is the same as the *Face of a Place*, or the *Tenaille*, being all that is contained between the *Flanked Angles* of two neighbouring *Bastions*, viz. The two *Faces*, the two *Flanks* and the *Curtin*.

FUSE, is a Pipe full of Wild-Fire, put into the Touch-hole of a Bomb, Grenado, or the like, to fire it.

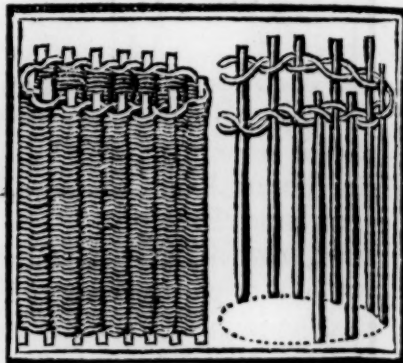
FUSIL, see *Firelock*.

FUSILEERS, are Foot Soldiers armed with *Fusees*, with Slings to sling them.

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GABIONS, or *Cannon-Baskets*, are *Baskets* 5 or 6 Foot



high, and about four in Diameter at Top and Bottom; they are filled with Earth to make a *Cover* or *Parapet* against the Enemy, and are sometimes used in making *Batteries*, and are brought empty to the Place, and placed three a Breast, which makes the Distance between the *Embrasures*; two are placed behind these, so as to cover the Joinings of the first three, and one behind the two, which make the *Embrasure* wide enough at the Outside, these six *Gabions* being the *Merlon*; the *Pioneers* or *Soldiers* employed for that Use, fill them with Earth, but they are never so good as a *Battery* raised of Earth or *Fascines*, because, if there be a *Counterbattery* to play

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play upon them, they are easily ruined. Sometimes they are used in making *Lodgments* on a *Post*, and sometimes in making the *Parapet* of the *Approaches*, especially when the Attack is carrying on, through a rocky Ground. When the *Approaches* are got near the *Covert-Way*, the Besiegers endeavour to set the *Gabions* on fire by small *Fascines* or *Bavins* pitched over, which they throw upon them. See the *Figure*.

GALLERY or Passage made cross a *Moat*, is a Walk of strong Beams, covered overhead with Planks, and loaded with Earth: 'Twas formerly



used for putting the *Miner* to the Foot of the *Rampart*: Sometimes the Gallery is covered over with *Raw-Hides*, to defend it from the Artificial Fire of the Besieged. It ought

G A T

to be eight Foot high, and ten or twelve wide; the Beam ought to be half a Foot thick, and two or three foot asunder; the Planks or Boards nailed on each Side, and filled with Earth or Planks in the Middle; the Covering to rise with a Ridge, that what is thrown upon it by the Besiegers to burn it, may roll off. See the *Figure*.

Gallery of a Mine, is the same as *Branch of a Mine*, and is a Passage under Ground of three or four Foot wide under the Works, where a *Mine* or *Countermines* is carried on. The Besieged and the Besiegers carry each of them Branches under Ground, in search of each others *Mines*, which often meet and destroy one another, or at least disappoint the Effect of the *Mine*. See *Mine*.

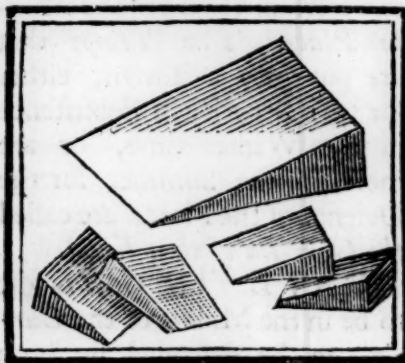
GARRISON Town, is a strong Place, in which *Troops* are quartered, and do Duty for the Security of the Place; keeping strong Guards at each *Port*, and a Main Guard in the *Market-Place*. The *Troops* that are put into a Town, either for their Security or Subsistence in the Winter time, or are there in the Summer for the Defence of the Place, are called the *Garrison of that Town*.

GATE. The Gate ought to be in the Middle of the *Cur-tin*, to be defended by both

G A S

Flanks; those in the *Flank*, weaken the most necessary part of the *Fortification*, and when they are in the *Face*, they are still more prejudicial to the *Bastion*, which ought to be clear, to make *Retrenchments* upon Occasion. At the opening of the *Gates*, a Party of Horse is sent to *Patrouille* in the Country round the Place, to discover *Ambuscades* or *Lurking Parties* of the Enemy, and to see if the Country be clear. In some Garrisons the Guard mounts at the opening of the *Gates*, so that in case of a Surprise, both the Old and the New Guards being under Arms, they are in a Condition of making a good Defence. The Word nor the Orders ought never to be given, till after the *Gates* are shut, for fear of Spies lurking in the Town, that may carry Intelligence to the Enemy.

GAZONS, are Sods or Turfs about a Foot long, and



G E N

half a Foot broad, cut in form of a *Wedge*, to face the *Parapet*; they are made so, that their Solidity forms a Triangle; that being mix'd with the rest of the Earth of the *Rampart*, they may easily incorporate in a Mass. The first Bed of *Gazons* is fixed with Pegs of Wood; the second Bed ought to be laid to bind the former that is over the Joints of it, and so continued till the *Rampart* be finished; betwixt these Beds they generally sow all sorts of binding Herbs to strengthen the *Rampart*.

GENS-D'ARMES, or Men of Arms, are a Body of Horse divided into Independent Troops, called so, because formerly they fought in Armour; they are part of the King of France's Household; these Troops are commanded by *Captain-Lieutenants*, the King and Princes of the Blood being their *Captains*; the King's Troop, besides a *Captain Lieutenant*, has two *Sub-Lieutenants*, three *Ensigns*, and three *Guidons*. The other Troops, which are those of the Scots *Gendarmes*, the Queen's, the Dauphin's, the *Gendarmes* of Anjou, Burgundy, the English and Flemish *Gendarmes*, and those of the Duke of Orleans, are called the *Small Gendarmery*, and have each a *Captain-Lieutenant*, *Sub-Lieutenant*, *Ensign*

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sign, Guidon, and Quarter-Master. They carry a *Standard* longer than the *Light Horse*, and divided into two *Points* a little rounded, generally adorned with some *Device* or *Cypher* in *Embroidery* and a *Fringe*; each *Troop* has a pair of *Kettle-Drums*, and two *Trumpets*.

GENERAL of an *Army*, is he who commands in chief. The *Function* of a *General*, is to regulate the *March* of the *Army*, and their *Encampment*, to visit the *Posts*, to command *Parties* for *Intelligence*, to give out the *Orders* and the *Word* every *Night* to the *Lieutenant* and *Major Generals*; in *Day* of *Battle*, he chuses the most advantageous *Ground*, makes the *Disposition* of his *Army*, posts the *Artillery*, sends off the *Baggage* to a *Place* of *Security*, and sends his *Orders* by his *Aid de Camps*, where there is *Occasion*. At a *Siege*, he causes the *Place* to be *invested*; he views and observes it, orders the making of the *Lines* of *Circumvallation* and *Contravallation*, and making the *Attacks*; he visits often the *Works*, and makes *Detachments* to secure his *Convoys*. The *Charge* of a *General* is of a great *Extent*, and requires a particular *Care*, because it is on him the *Sovereign* reposes the *Care* of all his *Army*.

GLA

General of Horse, and *General of Foot*, are *Posts* next under the *General* of the *Army*. They have an absolute *Command* over all the *Horse* or *Foot* in an *Army*, upon all *Occasions*, above the *Lieutenant Generals*.

General of the Artillery, or *Master-General of the Ordnance*, is one of the greatest *Employs* in the *Kingdom*, being a *Charge* of great *Trust*; it is generally bestowed on one of the first *Peers* of the *Kingdom*; he has the *Management* of all the *Ordnance* of the *Kingdom*, and ought to know and consider whatever can be serviceable or useful in the *Artillery*, and to distribute the *Vacancies* to such as are qualified for them; and has for his *Assistants* in that *Employ*, a *Lieutenant-General*, who commands in the *Absence* of the *General*; a *Surveyor-General*, *Clerk*, *Store-Keeper*, and *Clerk of Deliveries*, who are called the *Principal Officers* of the *Ordnance*.

GIN or *Crab*, is an *Engine* for mounting *Guns* on their *Carriages*, or dismounting them.

GLACIS, signifies an easy little *Slope*, and is that *Mass* of *Earth*, which serves as a *Parapet* to the *Covert-Way*, which slopes easily towards the *Campaign*: The *Difference* betwixt
Talus

G O R

Talus and *Glacis*, is, that in the one the Height is more than the Base of the Slope, and in the other, the Base of the Slope is more than the Height; the Breadth of the *Glacis* is generally the Length of the *Flank*, but the largest are the best; it is likewise called *Esplanade*, but that Word grows obsolete. The *Soldiers* corruptly call the Top of the *Glacis* the *Counterescarp*. When the Approaches are brought to the Foot of the *Glacis*, they are so near, that they cannot turn any way, but they must be Enfiladed, therefore they are carried straight forwards by Sap, unless it be resolved to carry the *Covert Way* by Assault.

GORGE of a *Bastion*, is that Space which is taken equally on each Side of the *Angle* of the *Figure* on the Sides of the *Polygon*, which makes the Entry into the *Bastion* from the Town or Place, one half of which is called the *Demi-Gorge*. *Gorge* of a flat *Bastion*, is a right Line, which terminates the Distance between two *Flanks*. *Gorge* of a *Half Moon*, is a Distance between the two *Flanks*, taken on the *Angle* of the *Counterescarp*. That of a *Ravelin*, is the Distance between the two sides or *Faces* towards the Place; the *Gorges* of all other Out-Works, are

G R E

the Entry into them from the Place, or the Distance between their Sides, and ought to be without a *Parapet*, only plain, lest the Besiegers, being Masters of the Work should there find a Cover from the Fire of the Place; yet they are sometimes palisaded to prevent a Surprise. In a Siege they are generally undermined, that they may be blown up before the Enemy can make a Lodgment upon them.

GOVERNOUR, is a very considerable Officer, and has a great Trust reposed in him, and ought to be very vigilant and brave. His Charge is to order the *Guards*, the *Rounds*, and the *Patrouilles*, to give every Night the Orders and the Word, after the Gates are shut, to visit the *Posts*, to see that both *Officers* and *Soldiers* do their Duties, and to send frequently Parties abroad for Intelligence, and to raise Contribution.

GRENADIER, is a Foot Soldier, armed with *Sword*, *Firelock*, *Bayonet*, and a *Pouch* to hold his *Grenades*; they are cloathed differently from the rest of the *Battalion*, and wear high Caps; each *Regiment* has a *Company* of *Grenadiers*, which takes always the Right of the *Battalion*. The *Grenadiers* are generally the tallest and briskest

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Fellows, and always the first upon Attacks: When there is any Appearance of Action, each *Grenadier* carries three *Hand Grenades*. *Horse Grenadiers*, called by the *French Grenadiers-Volans*, or *Flying-Grenadiers*, are such as are mounted on Horseback, and fight on Foot; their Exercise is the same with the other *Grenadiers*.

GRENADÉ, is an Iron Shell filled with fine Powder, which being fired, bursts the Metal in Pieces amongst those who are near where it falls, and who are obliged to quit their Post, or run the Hazard of having their Legs and Arms broke and spoiled. The *Grenade* has a Vent to receive a *Fuse*, which is made of the same Composition with that of a *Bomb*, that the *Grenade* may not break in the Hand of the *Grenadier*, before it be delivered.

GUARD, is a Duty performed by a Body of Men, with Vigilance, to secure all from the Efforts and Surprizes of an Enemy. In a *Garrison* the *Guards* are relieved every Day, and it comes to every Soldier's Turn once in three Days; so that they have two nights in Bed, and a third upon Guard.

Main-Guard, is that from whence all the other small

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Guards are detached; those who are to mount the Guard, meet at the respective Captain's Quarters, and are carried from thence to the *Parade*; where, after the whole Guard is drawn up, the small *Guards* are detached for the *Ports* and *Magazines*, and the subaltern *Officers* throw Lots for their *Guards*, and are subordinate to the *Captain* of the *Main-Guard*. The *Guards* are mounted in *Garrisons* at different Hours, according as the *Governour* pleases, but the most usual is at the opening of the Gates at ten a Clock, or at two in the Afternoon.

Advanced-Guard, is the Party of either Horse or Foot that march before a Body, to give them Notice if any Danger appears; when the Army is upon their March, the *Grand Guards* who should mount that Day, serve as an *Advance-Guard* to the Army; if a Body of Foot be marching, their *Advance-Guard* are Foot. In small Parties, 6, or 8 Horse are sufficient, and they are not to go above 4 or 500 Yards before the Party. An *Advanced-Guard* is likewise the small Body of 12 or 16 Horse, under a *Corporal* or *Quarter-Master*, who are posted before the *Grand Guard* of the Camp.

Rear-Guard, is that part of the

G U A

the Army which brings up the *Rear*, which is generally the old *Grand Guards* of the *Camp*. The *Rear Guard* of a Party, is 6 or 8 Horse, that march about 4 or 500 Paces behind the Party. The *Advanced Guard* going out upon Party make the *Rear Guard* in their Return.

Grand-Guard, are 3 or 4 *Squadrons* of Horse commanded by a Field Officer posted before the *Camp* on the Right and left Wing towards the Enemy, for the Security of the *Camp*; this *Guard* mount every Morning about seven or eight a Clock. See *Camp*.

Picket-Guard, is a certain number of Horse and Foot, who are to keep themselves in a Readiness, in case of an *Alarm*; the Horse keep their Horses saddled, and are booted all the time, in order to mount in a Minute. The Foot draw up at the Head of the *Battalion*, at the beating of the *Tattou*; but return to their Tents, where they hold themselves in a Readiness to march, upon any sudden *Alarm*; this forms a good Body able to make a Resistance, till the Army can be in a Readiness.

Forrage Guard, is a Detachment sent out to secure the *Forragers*, and are posted at all Places, where either the Enemy's Party may come to disturb the

G U A

Forragers, or they may be dispersed too near the Enemy, and be taken; this is likewise called the *Covering Party*, and marches the Night before the Forraging, that they may be posted in the Morning before the *Forragers* come; they consist both of Horse and Foot, and must stay at their Post, till the *Forragers* be all come off the Ground.

Artillery-Guard, is a Detachment from the Army, to secure the *Artillery*; their *Corps de Garde* is in the Front, and their *Centries* round the Park; this is a 48 Hours *Guard*, and upon a March they go in the Front and Rear of the *Artillery*, and must be sure to leave nothing behind; if a *Gun* or *Waggon* break down, the *Captain* is to leave a part of his *Guard* to assist the *Gunners* and *Matrosses* in raising it again.

Corps de Garde, are *Soldiers* entrusted with the *Guard* of a Post under the Command of one or more Officers.

Guards; the *Horse-Guards*, are Gentlemen chosen for their Bravery and Fidelity, to be entrusted with the *Guard* of the King's Person, divided into three *Troops*, called the *Troops of Guards*; each *Troop* hath a *Colonel*, 2 *Lieutenant-Colonels*, a *Cornet*, a *Guidon*, 4 *Exons*, *Brigadeers*, and *Sub-Brigadeers*,

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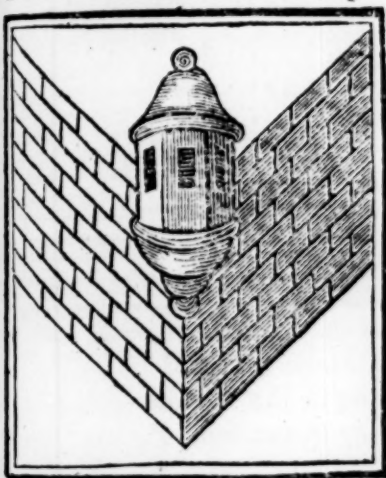


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and 160 private Men. *The Foot Guards* are *Regiments* of Foot appointed for the *Guards* of his Majesty and his Palace; there are two *Regiments* of them, called the *First* and *Second Regiments of Guards*, the one having four *Battalions*, and the other two; the *Regiment of Scots Guards* is likewise two *Battalions*.

GUERITE, is a small Tower of Stone or Wood, ge-



nerally on the Point of a *Bastion*, or on the Angles of the *Shoulder*, to hold a *Centinel*, who is to take care of the *Foss*, and to watch to prevent Surprizes; some call *Echaugette* those which are made of Wood, and are of a square Form, for the *Guerites* of Stone are roundish, and are built half without the Wall, and terminate at a Point below, which ought to be at the *Cordon*, that the *Centinel*

HAL

may discover along the *Faces*, *Flanks* and *Curtins*, and all along the *Foss*: They ought to be about six Foot high, and their Breadth three and a half.

GUIDES; *Captain of the Guides*, is an Officer appointed for providing Guides for the Army, of which he ought to have always a sufficient number with him, who know the Country, to send out as Occasion requires; such as are to guide the Army on a March, for Convoys, Parties, Baggage, Artillery, and Detachments; to provide which he ought to have a Party of Horse to go to the Adjacent *Villages*, *Castles*, or *Forts*, to demand *Boors*, whom he brings to his Quarters, and keeps under a Guard, lest they should escape, till the Army come to another Ground, where he can be provided with others: He ought to understand several Languages, especially that of the Country in which the Army is.

GUIDON, is a *French* Term for him that carries the *Standard* in the Guards or *Gens d'Armes*, and signifies likewise the *Standard* itself.

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HALF-MOON, is an *Out-work* composed of two *Faces*, which form a *Saliant Angle*,

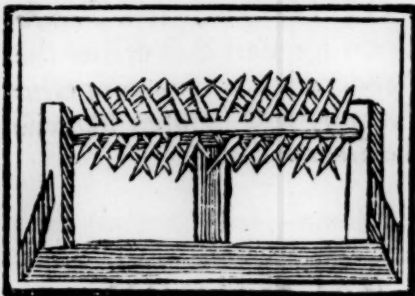
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Angle, whose *Gorge* is turned like a *Crescent*: They were used formerly for covering the Points of *Bastions*; but have been found of no Use, because having only the *Ravelins* to defend them, they are but very indifferently flanked; the *Ravelins* built before the *Curtins*, are now called *Half-Moons*.

HEAD of a Work, is its *Front* next the Enemy, and farthest from the Place; as the *Front* of a *Horn-Work* is the Distance between the *Flanked Angles* of the *Demi-Bastions*. The *Head* of a *Double Tenaillon* is the *Salient Angle* in the middle and the two other Sides, which form the *Re-entring Angle*.

HEPTAGON, is a Figure capable of being fortified with seven regular *Bastions*.

HERISSON, is a *Barriere* made of one strong Beam or Plank of Wood, full of Iron Spikes, it is supported in the Middle, and turns upon a Pi-



not or *Axis*; it is used in stopping a Passage like a *Turn-Stile*,

HER

for it is equally balanced upon the *Pivot*, standing upright in the Middle of the Passage, upon which it turns round, as there is Occasion to open or shut the Passage.

HERSES or *Portculleffes*, are strong Pieces of Wood join-



ted cross-ways, like a *Lattice* or *Harrow*, used formerly to hang in the Middle of a *Gate-Way* of fortified Towns, to be let fall to stop the Passage, in case the Gate had been broke down, or Petarded. It is either a Stop, or a Separation, if any of the Enemy have already entred; for before it can be broke open, the besieged have time to rally and repulse them. See *Orgues*.

Herse, is likewise an Engine like a *Harrow*, full of Iron Spikes; and used instead of the *Chevaux de Frise*, to throw in the Ways where Horse or

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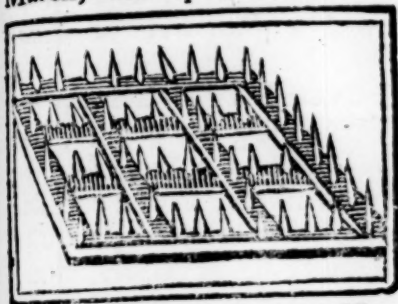
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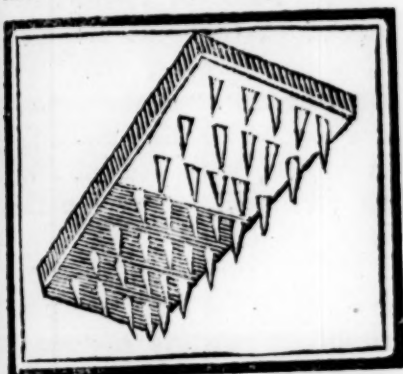
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Foot are to pass, to hinder their March, and upon Breaches to



stop the Foot. Common Harrows are sometimes made use of, and are turned with their Points upwards. See the Figure.

HERSILLON, is for the same Use as the *Herse*, and is



made of one strong Plank of Wood, about ten or twelve Foot long, stuck full of Points or Spikes on both Sides, as the Figure shews.

HEXAGON, is a Figure of six Sides, capable of being fortified with six *Bastions*.

HOBITS, are a sort of small *Mortars*, about 8 Inches Diameter, some 7, some 6; they differ nothing from a *Mor-*

H O R

tar, but in their Carriage, which is made after the Fashion of a *Gun-Carriage*, but much shorter; they march with the Guns, and are very good for incommoding an Enemy at a Distance, with small *Bombs*, which they throw two or three Miles; or in keeping a Pass, being loaded with *Cartouches*.

HORN-WORK, is a Work which the *French* Engineers prefer before *Tenailles*, *Swallow Tails*, or *Priest-Bonnets*, because it takes in a great deal of Ground, and has a better Defence; it is composed of two long Sides or Faces parallel, the Distance between them being the Length of one *Curtin*; their Length, measuring from the Angle of the Shoulder, is the Length of one Side of the *Polygon*, or of the *Curtin*, and one *Demi-Gorge*. The Head or Front of this Work is fortified with two *Demi-Bastions* and a *Curtin*. They have sometimes *Flanks* on their long Sides, and then they are called *Horn-Works* with double *Flanks*, or *Shoulders*. They have generally a *Ravelin* in their *Gorge*, and a small *Ravelin* before the *Curtin*.

Horse-Shoe, is a small round or oval Work, with a *Parapet*, made generally in a Moat or Marsh.

INC

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INCAMP; *To incamp*, is the pitching of *Tents*, when the Army after a March is arrived at a Place where it is designed to stay a Night, or longer; the *Serjeants Tents* in the *Foot*, and and *Quarter-Masters of Horse*, are the first of the *Company* or *Troop*; the *Officers* incamp in the *Rear*, the *Subalterns* in one *Line* next the *Company* fronting from it, the *Captains* in another *Line* at some Distance, each behind his own *Company* fronting the *Subalterns*; the *Field-Officers* behind them, the *Colonel* in the *Center*, the *Lieutenant Colonel* on his *Right*, the *Major* on his *Left*, and the *Sutlers* behind all. Each *Company* makes a *Line* in *File*, having an Allowance of seven *Foot* for a *Tent*, and two *Foot* Distance; the *Tents* of two *Companies* front one another, leaving a *Street* of five or six *Yards* between them. The *Troops* of *Horse* incamp the same *Way*, only the Distance between the *Tents* is about 3 or 4 *Yards* for the *Forrage*, and the Space between two *Troops*, is 14 or 15 *Yards* for the *Stables*: At two *Yards* Distance from the *Doors* of their *Tents*, is a *Rope* called the *Picquet-Rope*, stretched upon pointed

IND

Stakes, to which their *Horses* are tied. For the *Ground* allowed a *Battalion* or *Squadron*. See *Camp*.

INDENTED-LINE, is a *Line* running out and in, like the *Teeth* of a *Saw*, forming several *Angles*, so that one *Side* defends another; they are used on the *Banks* of *Rivers*, where they enter a *Town*, likewise the *Parapet* of the *Covert-Way* is often indented. This is by the *French Engineers* called *Redents*; small *Places* are sometimes fortified with such a *Line*, but the Fault of such *Fortifications*, is, that the *Besiegers* from one *Battery*, may ruin both the *Sides* of the *Tenaille* or *Front* of a *Place*, and make an *Affault*, without *Fear* of being enfiladed, since the *Defences* are ruined.

INDEPENDENT *Troop* or *Company*, is what is not incorporated into any *Regiment*.

INFANTRY, are the *Regiments*, or *Independent Companies* of *Foot* in an *Army*; they are formed into *Brigades*, like the *Cavalry*; each *Brigade* consists of 4, 5, or 6 *Battalions*; the *Regiments* of *Foot Guards* take the *Post* of all the *Infantry* in the *Army*; the other *Regiments* take *Posts* by *Seniority*; the oldest *Regiment* takes the *Right* of the first *Brigade*; the second takes the

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Right of the second *Brigade*; the third of the third, and so on. The next in Seniority take the Left of the *Brigades*, and leave the Centers for the youngest *Regiments*. The first *Brigade* takes the Right in the first *Line*, and the second *Brigade* the Right of the second *Line*; the third and fourth the Left of the two *Lines*, and the youngest *Brigade* in the *Center*.

INSULT, is the attacking a Post with open Force, without using *Trenches*, *Saps*, or any *Approaches*, but coming without Shelter to Blows with the Enemy. The Besiegers generally insult the *Counterscarp*, to shun the Enemies *Mines*, that they may have prepared, by not giving them time to fire them. In such Attacks, the *Grenadiers* march before the rest of the *Troops*, and the *Work-men* go prepared to make a *Lodgment*.

INTRENCHED; an *Army* is said to be *intrenched*, when they have raised Works before them, to fortify themselves against the Enemy, that they may not be forced to engage at a Disadvantage.

INTRENCHMENTS, are all sorts of Works made to fortify a Post against an Enemy. The Word signifies a *Foss* or *Trench*, with a *Parapet*, or Rows of *Fascines* loaded with *Earth*, *Gabions*, *Sand-Bags*, or

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Hogsheds filled with *Earth*, to cover the Men from the Enemies Fire. A *Post* intrenched, is when it is covered with a *Foss* and *Parapet*. See *Retrenchment*.

INVALIDE, is a Man who has spent his Time in the Wars, and is either, through Age, or by reason of his Wounds, rendered incapable of the Service. They are disposed of in *Hospitals*.

INVESTING a *Place*, is when a *General* having an Intention to besiege it, detaches a Body of *Horse* to possess all the *Avenues*, blocking up the *Garrison*, and preventing Relief from getting into the *Place*, till the *Army* and the *Artillery* are got up to form the Siege.

K

KETTLE, is a Term the *Dutch* give to the Battery of *Mortars*, because it is sunk under Ground. See *Battery*.

KLINKETS, are a sort of small Gates made through *Palisades* for Sallies.

L

LABORATORY, signifies the Place where the *Fire-Works* and *Bombardiers* prepare their Stores.

LANSPESEADE, or *Anspesade*,
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L I E

Spesade, is under a *Corporal*, and assists him in his Duty, and performs it in his Absence; they have the same Pay as a Foot *Soldier*, but in *France* they have a greater Allowance; they are excused from common Duty, they teach the new *Soldiers* their Exercise, and post the *Centries*; their Place on a March is on the Right of the second Rank.

LIEUTENANT of *Horse* or *Foot*, is the second Officer in the *Troop* or *Company*, and commands in the Absence of the Captain. When the *Company* is at Arms, he takes the Left of the *Captain*, but the Right if the *Ensign* be there. He marches the *Company* in the Absence of the *Captain*, but when the *Captain* is present, his Post is in the *Rear*; when the *Battalion* marches in Line of Battle, the *Lieutenants* take their Post at the Head of the Divisions, according to their Seniority. He ought to inspect the Actions of the *Serjeants* and *Corporals*, to keep them to their Duty, and take care of every thing that is necessary to the *Company* to see them exercise, to cause them to keep their Arms clean and fit for Service, and to see that the *Soldiers* be provided of Powder and Ball.

Lieutenant Colonel, is the second Officer in a *Regiment*, and

L I E

should be a Man of great Experience; knowing how to attack or defend a *Post*, lead the *Regiment* to Battle, and how to make a good Retreat; he is to see the *Regiment* kept to their Exercise, and is to know the Qualifications of all the Officers of the *Regiment*. In the Absence of the *Colonel* he commands the *Regiment*; his Post is on the *Colonel's* Left Hand, three Paces before the *Captain's*, when there is but one *Battalion*; but if the *Regiment* be of two, the *Colonel* commands the first, and he the second. *Colonels* and *Lieutenant Colonels* are excused from mounting the Guard when the *Regiment* is in Garrison.

Lieutenant Colonel of Horse, is the same; he marches at the Head of the second *Squadron*.

Lieutenant General, is a Charge of great Consequence: They ought not only to understand their own, but also the Business of a *General*, because they are often intrusted with the Command of a *Flying Camp*, and sometimes with a part of the *Army*. There is every Day a *Lieutenant General* upon Command, who is called the *Lieutenant General of the Day*. In the Day of Battle, they command the *Wings* of the *Army*; and at a Siege, they command in the *Trenches* by turns.

L I N

turns. They are to execute the *General's Orders* upon all Occasions: Some are appointed over the *Cavalry*, others for the *Infantry*; sometimes on the *Advance-Guard*, others on the *Rear-Guard*, and sometimes they command a *Flying-Army*. They ought to be daily with the *General* to know his Orders; they are allowed each two *Aid de Camps*, and a *Foot Guard* mounted by a *Subaltern*, with a *Serjeant* and 30 Men.

LIGHT-HORSE; all the *Regiments of Horse*, except the *Guards*, are called the *Light-Horse*; each *Regiment* consists of six *Troops*, and is commanded by a *Colonel*, *Lieutenant-Colonel*, *Major*, *Captains*, *Lieutenants*, *Cornets*, and *Quarter-Masters*; they rank according to Seniority.

Line in Fortification, is sometimes applied to a *Trench*. To run a *Line*, is to dig a *Trench* with a *Parapet*; to line a *Work*, is to trace it out; to line a *Work*, is likewise to face it with Brick or Stone. *Lines* are sometimes made to cover a Country.

Line of Defence, is a supposed *Line* drawn from the *Angle* of the *Curtin*, or any other Point of it, to the *Flanked Angle* of the opposite *Bastion*; or it is a *Line* representing the Flight of a *Musquet Ball* from the Place

L O D

where the *Musqueteers* stand to scour the *Face* of the *Bastion*, and ought never to exceed the reach of a *Musquet*. It is *Fichant*, when it is drawn from the *Angle* of the *Curtin* to the *Flanked Angle*, which ought never to exceed 800 Foot; and *Razant*, when it is drawn from a Point in the *Curtin*, razing the *Face* of the *Bastion*; this *Line* shews how much of the *Curtin* is taken off for the second *Flank*.

LIZIERE; *Berm*, *Foreland*, or *Relais*, is a Space of Ground left at the Foot of the Rampart, on the Side next the Country, designed to receive the Ruins of the Rampart, to prevent its filling up the *Foss*; it is sometimes palisaded for the more Security; when this Space is covered with a *Parapet*, it is called a *Faussebray*, or *Low-Wall*.

LOCKSPIT, is the small Cut or Trench made with a Spade of about a Foot wide, to mark out the first Lines of a Work.

LODGMET, is a Work raised with *Earth*, *Gabions*, *Fascines*, *Wool-Packs*, or *Mantelets*, to cover the Besiegers from the Enemies Fire. In conducting the *Approaches* at certain Distances, are made *Lodgments*, or *Places of Arms*, to flank the Trenches, capable of holding 100 Men, which serve as a Guard to the Trenches.

M A D

But *Lodgments* made on the *Glacis*, *Covert Way*, *Breach*, &c. are much more dangerous, as they are more exposed to the *Enemies Fire*, and having less *Earth*. When it is resolved to insult the *Covert Way*, there must be great Provision made of *Fascines*, *Sand-bags*, &c. in the *Trenches*; and during the *Action* the *Pioneers* with *Fascines*, *Wool-Packs*, or *Sand-Bags*, should be making the *Lodgment*; covering themselves as advantageously as possible from the opposite *Bastion*, or *Place* most to be feared.

LUNETTE, is a small *Work* raised sometimes in the middle of the *Foss*, before the *Curtin*, forming the *Angle*; its *Terreplein* rising but a little above the *Surface* of the *Water*, about 12 *Foot* broad, with a *Parapet* of 18 *Foot*.

There is another sort of *Lunettes*, which are larger, and raised to cover the *Faces* of a *Half Moon*; they are likewise composed of two *Faces*, a longer and a shorter.

M

MADRIERS, are long *Planks* of *Wood* very broad, used for supporting the *Earth* in *Mining*, in carrying on a *Sap*, in making *Coffers*, *Caponiers*, *Galleries*, and many other

M A J

Uses at a *Siege*. They are likewise used to cover the mouth of *Petards* after they are loaded, and are fixed with the *Petards* to the *Gates*, or other *Places* designed to be forced open; when the *Planks* are not strong enough, they are doubled with *Plates* of *Iron*.

MAIN-BODY of the *Army*, is the *Body* of *Troops* that marches between the *Advance* and the *Rear-Guard*. In a *Camp*, it is that part of the *Army* which is encamped betwixt the *Right* and *Left Wing*.

Main-Guard, is a *Body* of *Horse* posted before the *Camp*, for the *Safety* of the *Army*. In *Garrison*, it is that *Guard* to which all the rest are subordinate.

MAJOR of a *Regiment* of *Horse* and *Foot*, is the next *Officer* to the *Lieutenant-Colonel*, and is generally made from eldest *Captain*; he is to take care that the *Regiment* be well exercised, that it be drawn up in good *Order* at a *Review*, or upon a *Parade*, or any other *Occasion*; to see it march in good *Order*, and to rally it, in case of its being broke. He is the only *Officer* among the *Foot* that is allowed to be on *Horseback* in time of *Action*, that he may be the readier to execute the *Colonel's Orders*, either in advancing or drawing off the *Regiment*:

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Regiment: he has an *Adjutant* appointed for his Assistant.

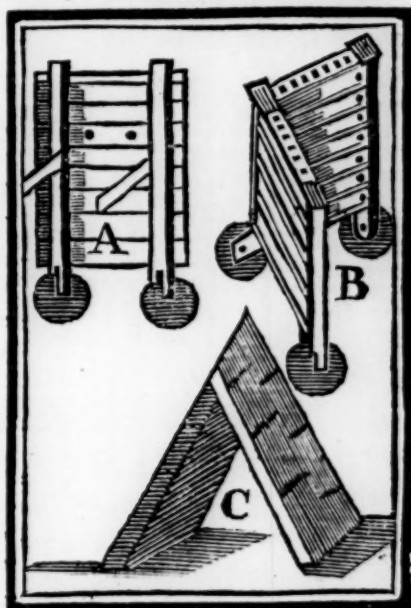
Major General, is the next Officer to the *Lieutenant-General*; when there are two Attacks at a Siege, he commands that on the left. His chief Business is to receive the Orders every Night from the *General*, or in his Absence, from the *Lieutenant-General of the Day*, which he is to distribute to the *Brigade-Majors*, with whom he is to regulate the *Guards*, *Gonvoys*, &c. and appoints the Place and Hour of their Rendezvous. He is to know the Strength of each Brigade in general, and of each Regiment in particular, and to have a List of all the *Field Officers*. Finally, he is in the *Army*, the same as the Major of a Regiment in the Regiment: He is allowed an *Aid de Camp*, and has a Serjeant and 15 Men for his *Guard*.

Town-Major, is the third Officer in a Garrison; his Business is to see the *Guards* mounted, the *Rounds* and *Posts* assigned; he regulates the *Centinels*, goes every Evening to receive the Word from the *Governour*, and gives it out upon the Place of *Arms*, to the *Adjutants* and *Serjeants* of the Garrison; he goes his *Round-Major*, visits the *Corps de Gardes*, and sees that all the *Soldiers Arms* are fixed, and in

MAN

good Order; he causes necessary Ammunition to be distributed among them, orders the Gates to be opened and shut, and gives the Governour an Account of all that Passes in the Place.

MANTELETS, are great Planks of Wood about five Foot high, and three Inches thick, which serve at a Siege to cover the Men from the Enemies Fire, being pushed forward on small Trucks; they are of two sorts, either single or double. Single *Mantelets* A, are made in joining two or three such Planks together with Bars of Iron, to make three Foot, or



three and a half broad, to cover those that carry them from the Enemies Fire. Double *Man-*

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telets, B, are made by putting Earth between two such Rows of Planks, and are used in making *Approaches* and *Batteries* near the Place, as the others are in making *Lodgments* on the *Counter-scarp*; they are covered with Latten, and are made smaller at Bottom than at Top, that they may be the more easily joined together, to cover the Soldiers from the Grenades and Fireworks of the Place, as C. Some are so made, as to cover the Soldiers from the Fire on *Front* or in *Flank*, as B.

MARCH, in general, is the Steps made in marching, or the moving of a Body of Men from one Place to another. *The Beat of the Drum*, when the Soldiers are upon March, or beginning to march, is likewise called *the March*. It is likewise a Word of Command, when a Battalion is to alter its Disposition.

MARSHAL of *France*, is the highest Preferment in the Army or in the Fleet: it is the same with *Captain-General*; when two or more Marshals are in one Army, the eldest Commands.

Velt-Marshal in *Germany*, *Brandenburg*, *Holland*, &c. is likewise the same with *Captain-General*.

Marshal de Camp, is in *France* the next Officer to the

M A T

Lieutenant-General, and is the same as a *Major-General* with us.

MASTER DE CAMP in *France*, is he who commands a *Regiment of Horse*, being the same as a *Colonel of Horse*.

Master de Camp General, is likewise a Post in *France*, being the second Officer over all the Light Horse, and commands in the Absence of the *Colonel General*.

MATROSSES, are Soldiers in the Artillery next to a Gunner; their Business is to assist the Gunners about the Gun, to traverse, sponge and fire, to assist him in loading, &c. they carry Firelocks, and march along with the *Store Waggon*s, both as a Guard, and to help, in case a Waggon should break down.

Maxims in *Fortification*, are certain general Rules established by *Engineers*, founded on Reason and Experience, which being exactly observed, a Place fortified according as they direct, will be in a good Posture of Defence. The chief *Maxims* are,

1. *There must not be any part of the Fortification, but what is discovered and flanked by the Besieged.* For if there be any part of a Place, which is not well flanked, the Enemy being there under cover, will with the more

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more ease attack it in that Place, and carry it.

2. *A Fortrefs should command all the Country round it; that the Besiegers may not cover themselves; nor find Places to favour their Approaches and Attacks, nor to overlook the Place, to batter them with more Advantage.*

3. *The Works furthest distant from the Centre of the Place, must be still lowest, and commanded by those that are nearer; to the End they may be defended by the higher Works, and those nearer the Place; that so the Enemy by being exposed, may be obliged to quit them, after they have been possessed of them, because of the Fire of the Besieged; and likewise, that the Enemy, by being Masters of such Works, may not overlook the Works of the Place.*

4. *The flanked Angle, or Point of the Bastion, ought to be at least 70 Degrees; that it may the better resist the Force of the Enemies Batteries, in case they designed to beat it down to lodge there.*

5. *The acute flanked Angle, near to a Right Angle, is preferable to all other. It is certain, if the Flanked Angle be a Right Angle, it has all the Strength can be given it, having Solidity enough to withstand the Enemies Batteries:*

M A T

but an *Angle* near to a Right, makes the *Tenaille* of the Place more compact, by the *Angle* of the *Shoulders* shortening and bettering the Defence, and by its not exposing the *Face* so much to the Enemy. So that it follows of Consequence, that an *Obtuse Angle* is very deficient.

6. *The shortest Faces are the best; because the longer they are the weaker, for the Enemy attacks them with a great Front.*

7. *The Flank must have some part under cover; which signifies it must be covered by an Orillon, otherwise the Defence is presently ruined, and the Lodgment no sooner made on the Counterscarp, but the Place is obliged to capitulate.*

8. *There must be a Conformity between these Maxims, to render the Fortification perfect. For if the Gorge be large, the Face suffers; the more the Flank is covered, the less it is subject to be ruined, but then the Defence is more oblique: In making a second Flank, the flanked Angle is made too weak: In discovering the Face, the Defence is more easy, but it is more exposed to the Enemies Batteries. In a word, there is Advantages and Disadvantages over all; and the Secret consists in judging whether conforming with one Maxim be more advantageous, than disagreeing with another.*

MIN

MEASURE-ANGLE, is an Instrument of Brass for measuring *Angles*, either *Saliant* or *Rentrant*, to know exactly the number of Degrees and Minutes, to lay them out upon Paper.

MERLON, is that part of the *Parapet* which is terminated by two *Embrasures* of a *Battery*, so that its Height and Thickness is the same with that of the *Parapet*, but its Breadth is ordinarily nine Foot on the inside, and six on the out-side. It serves to cover those on the *Battery* from the Enemy: And it is better of Earth, well beat and close, than of Stone, because this flies about, and wounds those whom the Work should defend.

MILITARY-EXECUTION, is the ravaging and destroying a Country for Contribution.

MINE, is an Overture made in a Wall or other Place, which is designed to be blown up with Powder, it is composed of a *Gallery* and a *Chamber*. The *Gallery* is the first Passage made under Ground, being no higher nor broader than to suffer a Man to work on his Knees. The *Chamber* is the small Space at the End of the *Gallery*, like a small Chamber where the Barrels of Powder are deposited, for blowing up what is proposed to be sprung. When the *Chamber* is dry, the Powder is put in

MIN

Sacks instead of Barrels, and the form of the *Chamber* is cubical; its Height and Depth being about six Foot. When the *Mine* is under the Rampart of an empty Bastion, left by the Thinness of the Earth on the side next the Place, the Powder should burst forth that way; the Top of the *Chamber* is cut into two Passages like Chimneys, to oblige the *Mine* to have its Effect upwards. If the Chamber be humid or damp, the Powder is put into Barrels or *Caïssons*, and fired with a *Sacifs*. If the Places to be blown up be rocky, or if there happen to be any thing else in the Way to hinder the *Miners*, they make *Fourneaux*, *Ar-raignée*, or *Rameaux*, all which are the same thing, and signify *Branches*, which terminate in small *Mines*, and are fired all together by several *Saucisses*. The *Gallery* of a *Mine* goes turning and winding, the Earth is put in small Baskets, and given out betwixt the *Miners* Legs backwards from one to another, because of the Narrowness of the Passage. The Earth of the *Chamber* is to be supported with Planks, and when the *Chamber* is damp, it must be floor'd with Boards.

MINER, is he that works in the *Mine*; he covers his Head with a *Hood*, to save his

Eyes

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Eyes from the Earth that falls down, which by this *Hood* is thrown over his Shoulders.

MINION, is a Piece of Cannon carrying a Ball of four Pound weight, the Diameter of its Bore is 3 Inches and 3 eighths, and the length of the Piece about six foot and a half.

MOAT, *Ditch* or *Foss*, is a Depth or Trench round the Rampart of a Place, to defend it, and prevent Surprizes; the Brink of the Moat next the Rampart, is called the *Scarpe*, and that opposite on the other side, is called the *Counter-scarp*, which forms a *re-entring Angle* before the Center of the *Curtin*. A dry Moat round a Place that is large, and has a strong Garrison, is preferable to one full of Water, because the Passage may be disputed Inch by Inch, and the Besiegers, when lodged in the Moat, are continually exposed to the Bombs, Grenades, and other Fireworks, which are thrown incessantly over the Rampart on their Works. In the middle of dry Moats, is sometimes made another small Moat, called the *Cunette*, which is generally dug so deep, till they find Water to fill it. The deepest and broadest *Fosses* are counted the best; but a deep *Foss* is preferable to a broad one; the ordinary Breadth is about 20 Fathom, and the

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Depth about 16 Foot. To drain a *Foss* or *Moat* full of Water, is to dig a Trench deeper than the Level of the Water, to let it run out; when it is drained, there are Hurdles thrown upon the Mud and Slime, and covered with Earth, or Bundles of Rushes, to make a sure and firm Passage.

MOINEAU, is a French Term for a little flat *Bastion* raised upon a *Re-entring Angle* before a *Curtin*, which is too long, between two other *Bastions*; it is commonly joined to the *Curtin*, but sometimes separated by a *Foss*, and is then called a *Detach'd Bastion*; they are not raised so high as the Works of the Place, because they must be exposed to the Fire of the Besieged, in case the Enemy should lodge themselves there. Their *Parapet*, as well as the *Parapet* of all *Out-Works*, ought to be Cannon-Proof, that is to say, 18 Foot thick.

MONT-PAGNOTE, is an Eminence chosen out of *Cannon-Shot* of the Place besieged, where curious Persons post themselves to see an Attack, and the manner of the Siege, without being exposed to any Danger.

MORTARPIECE, is a sort of a short Piece of Artillery, reinforced, and of a wide Caliber,

M O R

liber, differing from a Cannon, both in Form and Use; the Cannon serving to throw Ball, and the Mortar to throw *Bombs*, *Carcasses*, *Fire-Pots*. and several other sorts of Fireworks, as likewise *Stones*. *Mortars* are used both at Sea and Land, but they differ very much in Form. A Sea Mortar is generally 13 Inches Diameter of the Bore, is longer and more reinforced than a Land *Mortar*, because they are fired with a greater Quantity of Powder, sometimes with 30 or 33 Pound; some of them have their Beds or Stools of Metal cast in a Piece with the Mortars, others have them of a thick square Piece of Oak, which by the Help of *Hand-Screws* or *Jacks*, is turned round upon a strong Axis of Iron, to fire any way; they carry Bombs of 200 Pound, and generally weigh about 9 or 10000 weight.

Land Mortars are of different sorts; those used most in *England*, are, 10, 13, 15, and 18 Inches Diameter; there are smaller Mortars of six and eight Inches; all but the 18 Inch *Mortars* are mounted on a very thick Plank of Oak, on which rise to Cheeks or Brackets on the Sides of the Mortar. See the Figure at Cheeks. But the 18 Inch is mounted on a *Low Dutch Carriage*, consisting of

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two strong Planks of Wood, bound with thick Plates of Iron, and joined together with *Transoms* of Wood. All *Land Mortars* may be elevated to any Degree of the *Quadrant*. They have no Wheels, therefore on a March they are laid upon a Block Carriage made on purpose. They are never carried along with the Army, because of their great Weight, except upon an Occasion of a Siege or Bombardment; but a sort of small Mortars called *Hobits*, mounted in Gun-Carriages, are always a part of the Field Artillery.

Hand-Mortars are likewise of several sorts, as *Tinkers-Mortars*, which are fixed at the End of a Staff, of about four Foot and a half long, the other End being shod with Iron to stick in the Ground, while a Soldier with his one Hand keeps it at an Elevation, and with the other hand fires. *Fire-lock Mortars* are fixed in a Stock with a Lock like a Firelock; they swing between two Arches of Iron, with Holes answering one another, by which the Mortar is elevated; these stand upon a Sole or Plank of Wood, and may be carried by one Man from one Place to another. There are more sorts of Hand Mortars, but *Coeborne's* new Invention exceeds them all,

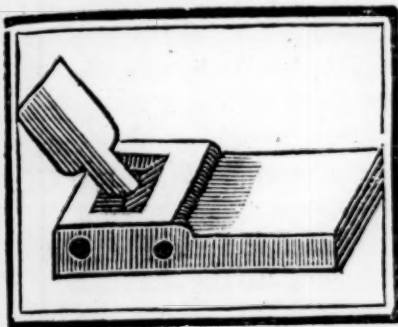
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all, so far as to deserve a particular Description. They are



made of hammer'd Iron of four Inches Diameter of the Bore, ten Inches and a half long, and nine Inches in the Chace, fixed upon a Piece of Oak 20 Inches long, 10 and a half broad, and betwixt 3 and 4 thick; they stand fixed at 45 Degrees of Elevation, and throw Hand Grenades, as all other Hand Mortars do; they are placed in the bottom of the Trenches, at two Yards Distance from one another, having each a Soldier to serve it, and an Officer to every 40 or 50, who lays them to what Elevation he thinks convenient, by raising or sinking the hind part of the Bed; three or four hundred of them are sometimes in Service at once, in different parts of the Trenches, 60, 70, or 80 in a Place: Those in one Place fire all at once, immediately after the Batteries have done, and are answered from another part of the Trench, which brings

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such a shower of Hand Grenades into the Covert Way, that those who defend it, are thrown into unavoidable Confusion.

Motion of a Bomb or Ball, is the Progress it makes in the Air after it is delivered, and is of three sorts: The *Violent Motion*, is the first Expulsion when the Powder has worked its Effect upon the Ball, or so far as the Bomb or Ball may be supposed to go in a right Line. The *Mixt Motion* is, when the weight of the Ball begins to overcome the Force which was given by the Powder, and the natural *Motion* is, when the Ball or Bomb is falling.

MOULDINGS of a Gun or Mortar, are all the eminent Parts, as Squares or Rounds, which serve generally for Ornament, such as the *Breach Mouldings* and *Muzzle Mouldings*; the *Rings of a Gun* are likewise *Mouldings*.

To Mount the Guard, is to go upon Duty: *To mount a Breach*, is to run up it, or to attack: *To mount the Trenches*, is to go upon Guard in the Trenches.

MUSQUET, is the most commodious and useful Fire-Arm used in the Army, either in attacking or defending a Post; it is easily managed, and is carried with small Trouble, which

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which makes its Use the more common ; the Pikes being laid aside in our Army of late, and *Musquets* brought in their stead, shows, that tho' Pikes are useful, yet *Musquets* are much more, and can do better Service. They carry a Ball of 16 in the Pound : The Length of the *Line of Defence* is limited in *Fortification*, by the ordinary Distance of a *Musquet-Shot*, which is about 120 Fathom, and almost all the *Military Architecture* is regulated by this Rule for the Length of the Defence, as the Effect of Cannon gives a Rule for the Thickness of the *Ramparts* and *Parapets*.

MUSQUETEER, is a Foot Soldier armed with a *Musquet* or *Firelock*, *Sword*, *Bayonet*, &c. The *Grand Musqueteers* in *France*, are *Troops* who fight sometimes on Foot, sometimes on Horseback ; they are Gentlemen of good Families, and are divided into two *Troops*, the one called the *Grey Musqueteers*, because of the Colour of their Horses, the other the *Black Musqueteers*, for the same Reason.

MUSTER, is a narrow Review of *Troops* under Arms, to see if they be compleat, and in good Condition ; that their *Arms* and *Accoutrements* be in good Order ; thereby to know

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the Strength of an Army : The *General* may order either *Muster* or *Review*, as often as he pleases.

Muster-Rolls, are the *Rolls* or *Lists* of the *Companies* or *Troops*, which are delivered to the *Commissary* by the *Captains*.

MUZZLE of a Gun or *Mortar*, is the Extremity of the *Cylinder*, where the *Powder* and *Ball* is put in.

Muzzle-Mouldings, is the Ornament round the *Muzzle*.

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To nail Cannon, or, as some say, to *Cloy* them, is to drive an Iron Spike by main Force into the Vent or Touch-hole, which renders the Cannon useless, till the Spikes be either got out, or a new Vent drilled. In all Sortees or Sallies of a Place besieged, nothing is so glorious as the nailing of the Besiegers Cannon, nor so advantageous to the Garrison, for it takes the Enemy some time to repair it.

NECK of a Gun, is that part betwixt the *Muzzle-Mouldings* and the *Cornish-Ring*. *Neck of the Cascabel*, is the part betwixt the *Breach-Mouldings* and the *Cascabel*.

OFF

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Oblique-Defence, is that which is under too great an *Angle*, as is generally the Defence of a second *Flank*, which can never be so good as a Defence in *Front*, nor is it approved by *Engineers*.

OCTOGON, is a Figure of 8 *Sides*, or *Polygons*, forming the same Number of *Angles*, and capable of being fortified with 8 *Bastions*.

OFFICER in the *Army*, is a Person having a Command in the *Army*. Those having Commissions from the King or *General*, are called *Commissioned Officers*, which includes all from the *General* to an *Ensign*. Such as have no Commission, but only Warrants from their *Colonels*, are called *Warrant-Officers*, as *Quarter-Masters of Horse*, and *Surgeons*. Those that have neither Commissions nor Warrants, are called *Staff-Officers*, as *Serjeants*, *Corporals*, *Lanspescades*, &c.

General Officers, are such as command a Body of *Troops* of several *Regiments*, as the *Captain-General*, *Lieutenant-General*, *Major-General*, *Brigadier-General*, *Quarter-Master-General*, and *Adjutant-General*.

Field-Officers, are those who

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have a Command over a whole Regiment, as the *Colonel*, *Lieutenant-Colonel*, and *Major*.

Subaltern-Officers, are the *Lieutenants*, *Cornets* and *Ensigns*.

TO OPEN Trenches, is the first breaking of Ground by the *Besiegers*, in order to carry on their Approaches towards a Place: The Difference betwixt opening and carrying on the Trenches, is, that the first is only the beginning of the Trench, which is always turned towards the *Besiegers*: It is begun by a small *Foss*, which the *Pioneers* make in the Night-time on their Knees, generally a Musquet-shot from the Place, or half a Cannon-Shot, and sometimes without the reach of Cannon-Ball; especially if there be no Hollows or rising Grounds to favour them, or if the Garrison be strong, and their Artillery well served. This small *Foss* is afterwards enlarged by the next *Pioneers* which come behind them, who dig it deeper by Degrees, till it be about 4 Yards broad, or 4 or 5 Foot deep, especially if they be near the Place; to the End, the Earth which is taken out of it may be thrown before them to form a *Parapet*, to cover them from the Fire of the *Besieged*: The Place where the Trenches are

ORD

are opened, is called the End of the *Trench*.

OPEN, is a Word of Command, as *Open your Ranks backward to such a Distance*, is when the Ranks fall back without changing Aspect, observing their *Right-Hand-Men* and their *Leaders*. *Open your Files from the Center*, is when they face outwards from the Center: If there be an odd *File* it stands, the rest take the Distance commanded. *Open your Files to the Right or Left*.

ORDER, is a Word of Command, as *Order your Firelock*, is the planting the But-End of the Piece against the middle of the outside of the Right Foot, with the Lock outwards.

Order of Battle, is a Disposition of *Battalions*, and *Squadrons* of an Army, in one or more Lines, according to the Nature of the Ground, either to engage an Army, or to be reviewed by the General.

Orders, are Notice given every Night by the General to the Lieutenant-General of the Day, who conveys them to the Major-General, and he to the Brigade-Major, who gives them to the Adjutants, and they to the Serjeants, that the Army may know when to march; what Detachments, &c. are to go abroad next Morning; when

ORD

they are to Forrage or Graze; when they are to muster or review, and many other Things; the Orders are generally given out in the Evening at the Head Quarters, where all the Generals meet at that time. *Orders in general*, signify all that is commanded by a Superior Officer.

ORDINANCE, all sorts of *Guns*, *Mortars*, *Firelocks*, *Carabins*, *Pistols*, &c. all sorts of *Arms* or *Stores*, belonging either to Offence or Defence.

ORGNES, are thick long Pieces of Wood pointed and shod with Iron, clear one of another, hanging each by a



particular Rope or Cord over the Gate-way of a strong Place, perpendicular, to be let fall in case of an Enemy. Their Disposition is such, that they stop the Passage of the Gate, and are preferable to *Herjes* or *Port-cullises*,

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cullises, because these may be either broke by a *Petard*, or they may be stopped in their falling down; but a *Petard* is uselefs against an *Orgne*, for if it break one or two of the Pieces, others immediately fall down, and fill up the Vacancy; or if they stop one or two of the Pieces from falling, it is no Hindrance to the rest, for being all separate, they have no dependence on one another. The Figure will explain them better.

ORILLON, is a Mass of Earth faced with Stone, built on the Shoulder of a *Casemated Bastion*, to cover the Cannon of the retired Flank, and hinder its being dismounted by the Enemies Cannon. They are made sometimes round, and sometimes square; some maintain the round to be best, because they are not so easily beat down by the Cannon of the Besieged, for the Roundness hinders the Ball very much from its Effect. Others like the square *Orillons* better, because they are less Charge, and can contain more Men to fire directly on the Face of the opposite Bastion, than the round can do. *Orillon* is likewise called the *Shoulder* and the *Epaulment*.

O V A L, is a plain Figure bounded by its own Circumference, within which no Point

O V A

can be taken, from which all Right Lines drawn to the Circumference can be equal.

OUT-WORKS, which are likewise *Advanced-Works*, *Detached* and *exterior-Works*, are Works of several sorts, which cover the Body of the Place; as *Ravelins*, *Half-Moons*, *Tenailles*, *Horn-Works*, *Crown-Works*, *Counter Guards*, *Lunettes*, &c. These serve not only to cover the Place, but likewise to keep an Enemy at Distance, and to hinder his getting any Advantage of Hollows or rising Grounds that may happen near the Counterscarp of the Place; for these Cavities and Eminences may serve for Lodgments to the Besiegers, and facilitate the carrying on their Approaches, and raising their Batteries against the Town. When *Out-Works* are for some Reasons placed one before another; then the nearest to the Body of the Place must be the highest, tho' lower than the Works of the Place, that they may command gradually those which are without them, that the Enemy may be obliged to dislodge, in case they had Possession of them, as likewise lest the Enemy, being Masters of them, should the easier cover themselves; so that the first *Ravelin* ought to be lower than the *Tenaille* of the Place, and higher

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higher than the *Horn-Work*, and the *Horn-Work* ought to be higher than the small *Ravelin* which covers it. The *Gorges* of all *Out-Works* must be plain, lest the *Besiegers* being *Masters* of the *Work*, it should serve to cover them from the *Fire* of the *Place*.

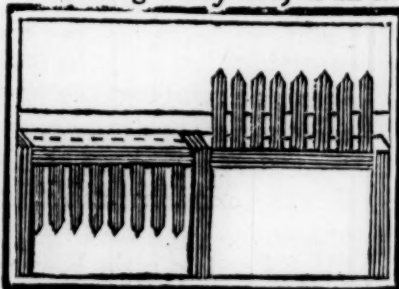
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PALISADES, are long Pieces of Wood or Stakes, planted generally before *Posts*, which might be taken by *Surprize*, or where the *Access* is very easy, to secure them both from a sudden and a regular *Attack*. They are generally 8 Foot long, and 6 or 7 Inches square; the one End is pointed, and the other is let 3 Foot perpendicularly into the *Ground*: Sometimes they are planted obliquely, pointing towards the *Enemy*, that in case the *Besiegers* should endeavour to pull them out with *Cords*, the *Cords* may slip off, having no hold. *Palisades* are planted on the *Berm*, at the Foot of *Bastions* of *Places* surrounded with a wet *Foss*, to prevent an *Escalade* or *Surprize*. They are likewise planted in the Bottom of dry *Moats*, especially if there be *Traverses* made. Sometimes they are set in the *Gorges* of *Half-Moons*, and other *Out-Works*. But above all, the *Parapet* of the *Covert-Way* must be well *Palisaded*, either on the *Parapet*,

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or in the *Covert-Way*. They are to stand so close, that the *Muzzle* of a *Musquet* can but just get betwixt them. The *Method* of planting them, is by digging a *Trench* of about a *Foot*, or a *Foot* and a half wide, and three *Foot* deep, which after the *Palisades* are set in as close to one another as before said, the *Trench* is then filled with *Earth*, which is beat and set very hard about the *Palisades* with *Rammers*. *Palisades* are very useful, and a good *Defence* in all sorts of *Fortifications*, provided they be well planted and close. They are likewise useful in *Sieges*, to plant on the out-side of the *Fosses* of the *Batteries*, to prevent the *Besieged* from surprizing the *Batteries* in their *Sallies*, and their nailing the *Cannon*. *Palisades* are either pulled up by shaking them with *Ropes*, cut down the *Grenadiers*, beaten down with *Cannon*, or burned down with small *Fascines* pitched over.

Turning-Palisades, is an In-



vention of *Coehorne's*. To preserve the *Palisades* of the *Parapet*

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Parapet of the *Redans* from the Besiegers Shot, he orders them so, that as many of them as stand in a Rod's Length, turn up and down like a Trap, with all the Facility imaginable. They are a good Defence, because they are not in Sight of the Besiegers, but just when they bring on their Attack, and yet are always ready to do the proper Service of *Palisades*. They are likewise frugal, because they may be preserved in the *Magazines*, and need not be left on the *Parapet*; besides, there may be square *Palisades* kept ready to supply the Place of such as may be broke by the Besieger's Cannon. The Figure shows one set up, and another down.

PARADE, is the Place where Troops meet together to go upon Guard, or any other Service. In a Garrison where there are 2 or 3, or more Regiments, each has their Parading-Place appointed, where they are to meet upon all Occasions, especially upon any Alarm. In a *Camp*, all *Parties*, *Convoys*, or *Detachments*, that are to go abroad, have a Parading Place appointed them at the Head of some Regiment.

PARALLEL, is a Term in Geometry, signifying two Lines equally distant from one another; which if prolonged ad

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infinitum, would never meet: the opposite Sides of a Square are parallel one to another. The *Ranks* of a *Battalion* are likewise parallel, so are the *Files* amongst themselves. The *Counterescarp* is generally drawn parallel to the Faces of the Bastion.

Parallels at a Siege, signify the *Trenches* or *Lines* made parallel to the Defence of the Place besieged; they are likewise called *Lines of Communication* and *Boyaus*.

PARAPET, is an Elevation of Earth, designed for covering the Soldiers from the Enemies Cannon or small Shot, wherefore its Thickness is from 18 to 20 Foot; it is 6 Foot high on the inside, and 4 or 5 on the Side next the Country; it is raised on the *Rampart*, and has a Slope above called the *Superiour Talus*, and sometimes the *Glacis* of the *Parapet*, on which the *Soldiers* lay their *Musquets* for to fire over: This Pente or Slope makes it easy for the *Musqueteers* to fire into the *Ditch*, or, at least on the *Counterescarp*. To fire raising the *Glacis* of the *Parapet*, is called *firing in Barbe*. The *Exterior Talus* of the *Parapet*, is the Slope facing the Country. The height of the *Parapet* being 6 Foot on the inside, it has a *Banquett* or two for the *Soldiers*

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diers who defend it, to mount upon, that they may discover the Country the better, as likewise the *Foss* and *Counterescarp*, to Fire as they find Occasion.

Parapet of the Covert-Way, or *Coridor*, is what covers that Way from the Sight of the Enemy, which renders it the most dangerous Place for the Besiegers, because of the Neighbourhood of the *Faces*, *Flanks* and *Curtins* of the Place; it is the same with *Glacis*, which signifies that whole Mass of Earth that serves to cover the *Coridor*, and goes sloping towards the Country.

PARK of Artillery, is the Place appointed for the Encampment of an *Artillery*, which is generally the *Rear* of both *Lines* of the *Army*. See *Artillery-Park*.

Park of Artillery at a Siege, is a Post fortified out of Cannon-Shot of a Place besieged, where are kept all the Arms and Utensils necessary for a Siege; as *Bombs*, *Petards*, *Carcasses*, *Hand Grenades*, *Powder*, *Ball*, &c. with all sorts of Instruments for removing the Earth, as *Spades*, *Shovels*, *Pickaxes*, *Bills*, *Hows*, and *Wheel-Barrows*, with many things more. Great Precaution is to be had about the *Park of Artillery*, for fear of Fire; therefore the Centries have their

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Pikes or *Staves* made on purpose, for they are not allowed to stand with Firelocks.

Park of Provisions, is the Place where the *Sutlers* pitch their Tents, and sell Provisions to the Soldiers; which is in the Rear of each Regiment, but the chief of all is the Ground allotted at the Head Quarters for the *Sutlers*, where there is still every thing requisite to be had, and it is from thence for the most part that the *Sutlers* are furnished. But I think the Place where the *Bread-Wagons* are drawn up, and where the Soldiers receive their *Ammunition-Bread*, being the Store of the Army, is properly the *Park of Provisions*.

PARTISAN, is a Person who is very dexterous in commanding a Party, and knows the Country very well; he is employed in surprising the Enemies Convoys, or in getting Intelligence.

Partisan-Party, is a small Body of Infantry given to a *Partisan*, to make an Incursion upon the Enemy, to lurk about their Camp, to disturb their Forragers, and to intercept their Convoys.

Partuisan, is a Weapon sometimes carried by Lieutenants, not unlike a Halbert.

PARTY, is a small Body of Horse or Foot, sent into the Enemies

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Enemies Country, to pillage or take Prisoners, or to oblige the Country to come under Contribution, which is to pay a certain Sum of Money, to redeem themselves from Plunder. *Parties* are often sent out by a General to view the Way and Roads, and to gain Intelligence, to look for Forrage, or to amuse the Enemy. Upon a March they are frequently sent upon Flanks of the Army, to discover the Enemy if near, and to prevent the Army's being surprized.

Party-Bleu, are a Company of Villains who infest the Roads in the *Netherlands*; they belong to neither Army, but rob both Sides, without any Regard to Passes.

PATEE, a small Work not unlike a *Horse Shoe*, that is to say, an Elevation of Earth of an irregular Form, but for the most part oval, having a Parapet; it is generally raised in marshy Grounds, to cover the Gate of a Place; it has only a fore-right Defence, and has nothing to flank it.

PATROUILLE, is a Night Watch, consisting of 5 or 6 Men commanded by a Serjeant, who are sent from the Guard to walk in the Streets, and prevent Disorder.

PAVILION, an old Term for a *Tent*, see *Tent*.

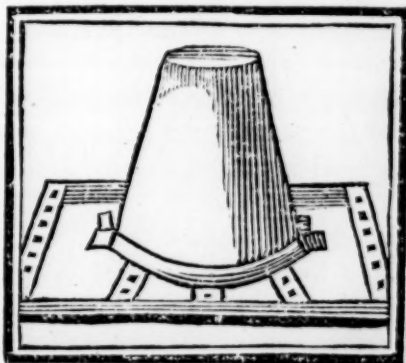
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Pay-Master, is he who is entrusted with the Payment of a Regiment.

PEDRERO, a small sort of Guns used on the *Quarter-Decks* of Ships; some of them have *Breeches* to screw out, so that they receive the Charge that way.

PENTAGON, is a Figure bounded by five Sides or *Polygons*, which form so many *Angles*, capable of being fortified with the like Number of *Bastions*.

PETARD, is an Engine of Metal shaped like a *Sugar-Loaf*, or *High-Crown'd-Hat*, made



for breaking open *Gates*, *Draw-Bridges*, *Barricades*, *Barriers*, &c. its Length is 7 or 8 Inches, the Diameter of the Mouth is five Inches, and that at Bottom one and a half; the Thickness of Metal at the Neck is half an Inch, and that of the Breech 12 or 15; its Charge of Powder is 5 Pound, or thereabout, and it weighs about 55

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or 60. There are much larger and stronger *Petards*, and there are likewise smaller: The first are employed in breaking open strong reinforced Gates, and the last such as can make but small Resistance. When the *Petard* is loaded with Powder, it is put upon a strong piece of Plank covered with a Plate of Iron on the outside, which covers the *Ouverture*, being hollowed a little for the Purpose; the Place where they join, is done over with *Wax*, *Pitch*, *Rosin*, &c. to inforce the Effect. This being done, it is carried to the Place designed to be blown up, where joining the Plank exactly to the Gate, the *Petard* is stayed behind, and fired by a *Fusée*, that the *Petardeer* may have time to get off. They are sometimes used in *Counter-Mines*, to break through into the Enemies Galleries to disappoint their Mines.

PETARDEER, is he who loads, fixes and fires the *Petard*, and ought to be a Man of Courage, for he is often exposed.

PICKET, is a small pointed Staff shod with Iron, which serves to mark out the *Angles* of a *Fortification*, and the principal Parts, when the *Engineer* is tracing a Plan upon the Ground with a Line. There are likewise small pointed Stakes,

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which serve to drive through *Fascines* or *Gazons*, to keep them fast when the Earth is bad, or the Work raised in haste.

Pickets, are likewise the Stakes which the *Troopers* drive before their Tents, about two Yards Distance; from one to another of these *Pickets*, is stretched a Rope called the *Picket-Rope*, to which they tie their *Horses*.

Picket, is likewise a Stake of nine or ten Foot high, fixed in the Ground, and standing upright; round the Foot of it are small Sticks with sharp Points: This is at the Head of each Regiment of Horse, to punish Crimes that do not deserve Death, by putting the Criminal with his Foot on one of these small pointed Sticks, and tying up his Hand to a Ring above his Head, so that he neither stands nor hangs, nor can he shift his Foot, nor change Feet to ease himself.

PIECE of Ordnance, includes all sorts of great Guns and *Mortars*. *Battering-Pieces*, are the large Guns used at Sieges for making the Breaches, such as the 24 *Pounder* and the *Culverin*; the one carrying 24, and the other 18 Pound Ball. *Field-Pieces* are 12 *Pounders*, *Demi-Culverins*, 6 *Pounders*, *Sakers*, *Minions*, and 3 *Pounders*, which march with the Army,

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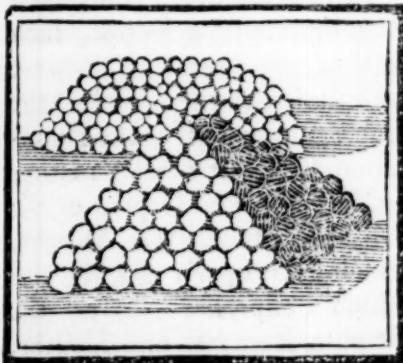
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Army, and encamp always behind the second *Line*, but in Day of Battle are in the Front. A Soldier's Firelock is likewise called his *Piece*.

PIKES, are the Arms carried by *Pike-Men*, who used formerly to be a third part of the *Company*, but they are now turned to *Musqueteers*.

Half-Pike, is the Weapon carried by an Officer of Foot, and differs from a *Pike*, because it is but 8 or 9 foot long, and the *Spear* is smaller and narrower.

PILE or *Pyramid of Bombs* or *Ball*, which is the way of disposing them in *Magazines*,



is the piling them up regularly in the Courts of the *Arsenal*, as may be seen at *Woolwich*; as suppose 385 Bombs to be made in a *Pile*, the first must be laid in a Square of 10 on each Side, which makes 100 in the first Bed, and let half a Foot in the Ground; to the end, the great Weight which comes above

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them may not force them to slide out, for then the whole *Pile* falls: The second Bed will be 81, which is 9 of a Side, and must be laid on the vacant Space which happens between every 4 Bombs of the first Bed; and the third Bed being eight of a Side, is sixty four laid the same way, and so to the Top of the *Pile*; which will terminate in one *Bomb* making a *Pyramid*, whose *Base* is a Square.

PIONEERS, are such as are commanded in from the Country, to march along with an *Army* for mending the Ways, for working on *Entrenchments* and *Fortifications*, and for making *Approaches*; but the Soldiers are most generally employed in all these things.

PIVOT, is a piece of Iron or Brass rounded at the Point, that it may turn easily round in a Piece or Sole of Iron or Brass, hollowed to receive it.

PLACE, signifies a Fortrefs or Town fortified regularly or irregularly, and is often used; and when we say it is a strong Place, &c.

Place of Arms in a Town, is a Space left near the Center of the Place, where generally the *Grand Guard* is placed, and where the Soldiers of the Garrison come to draw up in *Bat-*

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talía, to mount the *Guard*, from whence they are marched to their particular Posts. On an Alarm, the Soldiers who are not on Guard, are to repair thither with their Arms. In Places regularly fortified, the *Place of Arms* ought to be in the Center, and of a Figure like that of the *Polygon*; its Greatness ought likewise to be proportioned to the *Polygon*.

Place of Arms of an Attack, or of a Trench, is a *Foss* with a *Parapet*, or an *Epaulement* to cover a Body of Horse or Foot, where they may be at their Arms to withstand the Sallies of the besieged. The Places most convenient for making *Places of Arms*, are such as can easily succour one another, and are out of sight of the Defences of the Place besieged, as Hollows, or hollow Ways, especially if they cross one another, for their Depth serves as a *Parapet* to cover the Infantry: If they have not that natural Depth, they may supply that Defect with *Gabions*, *Sand-Bags*, or whatever can hinder the Besiegers from seeing into it. If there be a *Foss* made round it, it is called a *Redoubt*. In carrying on the Trenches, there must be such *Redoubts* raised at convenient Distances to lodge the *Infantry*, which have the Guard of the Trenches.

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Place of Arms of a Camp, is the Place chosen at the Head of the Camp for the Army, to form themselves in *Line of Battle*, for a Review, or the like.

Place of Arms of a Troop of Horse, or Company of Foot, is the Place where the Troop or Company are assembled.

Plan, *Ground-Plot*, or *Ich-nography* in Fortification, is the Representation of the first or fundamental Tract of a Work, shewing the Length of its *Lines*, the Quantity of its *Angles*, the Breadth of the *Ditches*, Thickness of the *Rampart* and *Parapets*, and the Distance of one part from another: So that a *Plan* represents a Work, such as it would appear, if it were cut equal with the Level of the *Horizon*, or cut off at the Foundation. But it marks neither the Heights nor Depths of the several Parts of the Works, which is properly *profile*, and which expresses only the Heights, Breadths and Depths, without taking notice of the Lengths. As *Architects*, before they lay the Foundation of their *Edifice*, make their Design on Paper, by which Means they find out their Faults; so an *Engineer*, before tracing his Works on the Ground, should make *Plans* of his Designs upon Paper, to the end he may do nothing

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nothing without serious Deliberation. Plans are very useful for Generals or Governours, in either attacking or defending a Place, in chusing a Camp, determining Attacks, conducting the *Approaches*, or in examining the strength and weakness of a Place; especially such Plans as represent a Place with the Country about it, showing the *Rivers, Fountains, Marshes, Ditches, Valleys, Mountains, Woods, Houses, Churches*, and other Particulars, which happen about a Place.

PLANKS or *Madriers*, are Pieces of Oak very thick and broad, see *Madrier*.

PLATES. The *Prise-Plates*, are two Plates of Iron on the Cheeks of a Gun-Carriage from the *Cape-square* to the *Center*, through which the *Prise-Bolts* go, and on which the *Hand-Spike* rests, when it poises up the Breech of the Piece. *Breast-Plates* are the two Plates on the Face of the Carriage, one on each Cheek. *Train-Plates*, are the two Plates on the Cheeks, at the Train of the Carriage. *Dulidge-Plates*, are the six Plates on the Wheel of a Gun-Carriage, where the Fellows are joined together, and serve to strengthen the *Dulidges*.

PLATFORM, in general, is an Elevation of Earth on

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which Cannon is placed, such as the *Mounts* on the Middle of *Curtins*: But it is likewise a sort of Bastion constructed on a Re-entring Angle, when its two Faces make a right Line. *Platform of a Battery*, is a Floor of Boards nailed down upon Sleepers, sloping a little towards the *Embrasure*, for the Guns to run upon, and to keep the Wheels from sinking into the Ground. The Slope serves to diminish the Reverse of the Piece, and for the more easy running her up to her *Embrasure*. Each Gun has generally a Platform for her self. See *Battery*.

PLATOON, or rather *Peloton*, a small square Body of *Musqueteers*, such as is used to be drawn out of a Battalion of Foot, when they form the Hollow Square to strengthen the Angles. The Grenadiers are generally thus posted. *Peloton* is the *French* Word, only the vulgar Corruption has brought it to be pronounced *Platoon*.

PONIARD, a sort of Short Sword used in *Spain* and *Italy*.

Point-Blank of a Gun, is the distance she throws a Ball in a supposed direct Line; the Gun being laid at no Elevation, but levelled parallel to the *Horizon*. I say, supposed direct Line, because it is certain, and easily proved,

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proved, that a Ball cannot fly any part of its Range in a right Line; but the swifter it flies, the nearer it approaches to a right Line; or the less crooked its Range.

POLYGON, is a Figure of more than four Sides, and is either regular or irregular, exterior or interior.

Polygon regular, is whose Angles and Sides are equal. It has an Angle of the Center, and an Angle of the *Polygon*. The Center of a regular *Polygon*, is the Center of a Circle, which circumscribes the *Polygon*, that is, whose Circumference passes through all the Angles of the Figure.

Irregular Polygon, is whose Sides and Angles are unequal.

Exterior Polygon, is the Lines drawn touching the Points of the *Flank Angles*, when a Place is fortified inwards.

Interior Polygon, is to fortify outwards, which makes the Angles of the Polygon to be the Angles of the Gorge, so that the whole Bastion is without the Polygon.

PONTON, is a Boat of Lattin, about 8 Yards long, and 2 broad; the Form of it is a long Square, having a large Ring at each Corner; it is laid upon a Carriage when the Army marches, and drawn by 5 Horses. Each Boat has an An-

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chor or Cable, and Baulks and Chests belonging to it. The Baulks are about 5 or 6 Inches square, and about 7 Yards long. The Chests are Boards joined together by wooden Bars, about a Yard broad, and 4 Yards long. When there is occasion for using these Boats, they are slipped into the Water, and placed about two Yards asunder, each fastned with an Anchor, having besides, a strong Rope, which runs through the Rings, and is fastened on each side of the River to a Tree or a Stake made very fast in the Ground. The Baulks are laid cross the Boats, at some Distance from one another, and the Chests upon them joined close, which makes a Bridge in a very short time for Horse, Foot or Artillery to march over.

PORT-FIRE, is a Composition of *Meal-Powder*, *Sulphur* and *Saltpeter*, ram'd into a Case of Paper, but not very hard; it is about 9 or 10 Inches long, and is used to fire Guns or Mortars instead of Match, but then it is cut into pieces of about an Inch long, and put in a Linstock or Cleft Stick.

POST, is any sort of Ground, fortified or not, where a Body of Men can fortify themselves, or be in a Condition of fighting an Enemy. To

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relieve a Post, is to go upon Guard in a Post.

Post of Honour; the *Advance-Guard* is a *Post of Honour*; the Right of the two *Lines* is the *Post of Honour*, and is always given to the eldest Regiments; the Left is the next *Post*, and is given to the next eldest, and so on; the Center of the *Lines* is the *Post* the least honourable, and is given to the youngest Regiments.

Advance-Post, is a Spot of Ground seized by a Party to secure their Front, and cover the *Posts* behind them.

POSTERN, is a small door in the Flank of a Bastion, or other part of a Garrison, to march in and out unperceived by the Enemy, either to relieve the Works, or to make *Sal-lies*.

POUCH; a *Grenadier's Pouch*, is a square Case or Bag of Leather, with a Flap over it, hanging in a Strap of about two Inches broad, over the left Shoulder, in which he carries his *Grenades*.

POWDER, is a Composition of *Sulphur*, *Saltpeter*, and *Charcoal*. The *Sulphur* and *Charcoal* take fire, and the *Saltpeter* makes the Crack.

POUNDER, as a 24 *Pounder*, is a Gun carrying a Ball of 24 Pound; its Diameter is 6

PRO

Inches, the length is from ten to twelve Foot long, it is a good battering Gun. *Twelve Pounder*, is a Gun carrying a Ball of twelve Pound, the Diameter is four Inches and 5 eighths, its length from eight to ten Foot. *Six Pounder* carries a Ball of six Pound, its Diameter is three Inches and six eighths, its length from seven to eight Foot; and *three Pounder*, carries a Ball of three Pound, the Diameter of the Bore is three Inches, and the length of the Piece about six Foot, or six and an half.

PROVOST-MARSHAL of an Army, is one appointed to secure Deserters, and other Criminals; he is to go often abroad round the Army, to hinder the *Soldiers* from pillaging; he indites offenders, and executes the Sentence which is pronounced; he likewise regulates the Weights and Measures of the Army, and the Price of all sorts of Provisions.

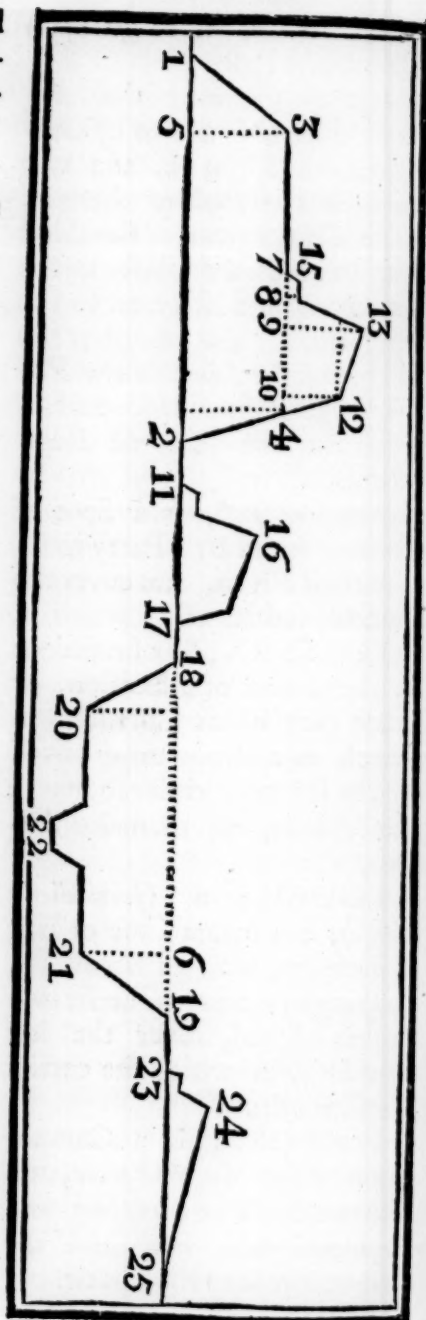
PROFILE; *Engineers* to represent the Heights, Depths and Thickness of a Work, with the Depth and Breadth of the *Fosses*, &c. do it by profile or *Orthography*, which supposes the Work to be cut perpendicularly from Top to Bottom. The following Figure shows the *Profile* of a Rampart, *Fausse-bray*,

PRO

bray, Fofs, Covert-Way, and Esplanade; every thing is explained by letters, and the proper Names fet down.

The EXPLANATION of the Figure.

- 1, 2, 3, 4. *The Solidity of the Rampart.*
- 1, 2. *The Basis of the Rampart.*
- 3, 4. *The Top of the Rampart.*
- 3, 5. *The Height of the Rampart.*
- 1, 3. *The Interior Talus, or Slope of the Rampart.*
- 2, 4. *The Exterior Talus of the Rampart.*
- 3, 7. *The Terre-plein.*
- 7, 4. *The Basis of the Parapet.*
- 7, 15. *The Banquett.*
- 8, 13. *The Interior Talus of the Parapet.*
- 4, 12. *The Exterior Talus of the Parapet.*
- 12, 13. *The Superior Talus of the Parapet.*
- 9, 13. *The Interior Height of the Parapet.*
- 10, 12. *The Exterior Height of the Parapet.*
4. *The Cordon.*
- 11, 16, 17. *The Faussebray with its Banquette.*
- 17, 18. *The Lifere or Barm.*
- 18, 19, 20, 21. *The Fofs.*
- 18, 20. *The Scarpe.*
- 19, 21. *The Counterscarp.*
22. *The Cunette.*
- 6, 21. *The Depth of the Fofs.*
- 19, 23. *The Covert-Way.*
- 23, 24, 25. *The Glacis or Parapet of the Covert-Way.*
- 23, 24. *The Height of the Parapet of the Covert-Way, with its Banquette.*
- 23, 25. *The Basis of the Glacis.*
- 24, 25. *The Pent or slope of the Glacis.*



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QUADRANT, or *Quarter* of a Circle, is an Instrument of Brass or Wood used by Gunners, in pointing Guns to an Object, and by *Bombarders*, in elevating their Mortars; it is made of two Pieces of Wood joined at right Angles, one of which is longer than the other, that it may enter the Muzzle of the Piece; they are joined by a Quarter of a Circle, which is divided into ninety Degrees, the Center of which is where the two Pieces join, from whence there hangs a Thread with a Plummet, which marks the different Elevations of Pieces, and the greatness of the Angles. The way of using it, is by putting the longest Side into the Muzzle of the Piece; the Plummet falls perpendicularly, and marks the Angle on the *Quadrant*; when the Gun or Mortar is elevated to the Degree desired, it is kept there by Coins of Wood put under the *Breech* of a Gun, or betwixt the *Bracket-Bolts* of a Mortar.

QUADRAT; to quadrat a Piece, is to see whether it is duly placed in its Carriage, and that the Wheels be of an equal Height.

Quarter, signifies the sparing Mens Lives, and giving

QUA

good Treatment to a vanquish'd Enemy.

Quarter in General, is the Ground on which a Body of Troops encamp, and signifies likewise the Troops encamped; as to beat up the Enemies *Quarter*, is to drive them from the Ground or Encampment.

Quarter of an Assembly, is the Place where Troops meet to march in a Body, and is the same with a Place of *Rendezvous*.

Quarter at a Siege, is the Encampment upon one of the most principal Passages round about a Place besieged, to prevent Relief and Convoys: When it is commanded by the General, it is called the *Head Quarters of the Army*: When the Camp is marked out about a Place besieged, then the *Quarters* are said to be disposed: When great Detachments are made from a *Quarter* for Convoys, &c. such a *Quarter* is said to be weakened.

Head Quarters, is the Place where the General of an Army has his Quarters: It is generally near the Center of the Army. The *Quarters* of the Generals of Horse, are in the Villages that happen between the Right and Left Wings; the Generals of Foot are often in the same Village with the General.

Quarter entrench'd, is a Place

QUA

fortified with a Ditch and Parapet, to secure a Body of Troops.

Winter-Quarters, are sometimes taken for the Space of Time included between the leaving the Camp, and taking the Field; but they are more properly the Places where the Troops are lodged during the Winter.

Quarters of Refreshment, is the Place where the Troops that have been much fatigued are sent to refresh themselves, during a part of the Campaign; that having refreshed and recovered themselves, they may be ready to take the Field again.

Quarter-Master of Horse, is a Warrant-Officer appointed by the Colonel, he takes up the Ground for the Troop, and divides it, in allotting so much for each Tent; he receives the Orders, keeps a List of the Troop, visits the Stables, and takes care of the Arms. He marches in the Rear of the Troop, but in Camp his Tent is pitched in the Front. In *Winter-Quarters* he receives and distributes the Forrage to the Troop. Each Troop has a *Quarter-Master*.

Quarter-Master of Foot, is an Officer who takes care of encamping the Regiment, for there is but one to a Regiment of Foot: He attends the *Quarter-Master-General* upon a

QUA

March, to know where the Ground is for the Regiment, which he divides among the Companies.

Quarter-Master-General, is a considerable Officer in an Army, and ought to be a Man of great Judgment and Experience, and to understand Geography; and since his Province is to mark the Marches and Encampments of an Army, he should know the Country perfectly well, all the Rivers, Plains, Marshes, Woods, Mountains, Passages, Defiles, &c. even to the smallest Brook. The Evening before a March, he receives the Orders and Rout from the General, and appoints a Place for the *Quarter-Master* of Foot and Horse to meet him next Morning, with whom he marches to the next Camp, where being come, and having viewed the Ground, he marks out to the *Quarter-Masters* the Ground allowed each Regiment for their Camp; he chuses the *Head-Quarters*, and appoints the Villages for the General-Officers of the Army, where they shall quarter; he appoints a proper Place for the Encampment of the *Train of Artillery*; he carries the Army a Forraging, and plants the Covering-Party, for their Security, at all the Passes round them, and assists in distributing

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ing the *Winter-Quarters* to the Army.

Quarter-Wheeling of a Body of Men, is turning the Front where the Flank was; which is done to the Right by the Man on the Right Angle, keeping his Ground, and facing about while the rest wheel.

Quit your Arms, is a Word of Command in the Foot, when they lay down their Arms, at which they stand up, till they are ordered to the Right about, at which they march clear of their Arms and disperse; but upon the Beat of Drum they run to their Arms with a *Huzza*, having their Swords drawn, and the Point upward.

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RABINET, a small sort of Ordnance between a *Falconette* and a *Base*, seldom used.

To **RAISE a Siege**, is to give over the Attack of a Place, and to quit the Works thrown up against it, and the Posts taken about it. If there be no Cause to fear a Sally from the Place, then the Siege may be raised in the day time, by sending first the Sick and wounded, the *Baggage*, the *Sutlers*, broken Cannon and Mortars, and if possible, all the Instruments which have been used in the Siege. The Artillery and Ammunition may follow, and a strong Rear-Guard must face the Besiegers, in case they

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should offer to charge the Rear. But if there be any Fear of an Enemy in Front, this Order must be altered according to the Prudence of the General, and as the Nature of the Country will allow.

To raise a Plan of a Fortrefs, is the measuring with Cords and Geometrical Instruments, the Length of the Lines, and the Capacity of the Angles, that by knowing the Length, Breadth, and Thickness of all the different Parts of a Fortification, it may be represented in small upon Paper, so as to know the Advantages and Disadvantages of it.

RAMPART, is an Elevation of Earth round a Place, capable of covering the Buildings from View, and from resisting the Cannon of an Enemy, as likewise of raising those that defend it, that they may discover the Country about it. A *Rampart* ought to be sloped on both Sides; that is, the Mass of Earth which composes the Rampart, ought to be larger at Bottom than at Top, more or less, according to the Nature of the Earth: It ought to be broad enough to allow the marching of Waggons and Cannon, besides the *Parapet* which is raised on it; its Thickness is generally about 12 Fathom, with the *Talus* or *Slope*. The Earth which makes the

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Rampart, is taken from the outside of it, because then the *Rampart* and *Foss* are made at the same time; from which it follows, that their Proportions depend on one another; for since the *Rampart* is made of a certain Bigness, the *Foss* must be dug deep enough to afford Earth for the *Rampart*, the *Parapet* and the *Esplanade*.

RÉNDEZVOUS, is the Place appointed by the General, where all the Troops which are to compose his Army, are to meet at a Day prefixed.

RANK, is the Order or streight Line made by the *Soldiers* of a *Battalion* or *Squadron*, drawn up Side by Side; this Order was established for the Marches, and for regulating the different Bodies of Troops and Officers which compose an Army or a Battalion. *Doubling of the Ranks*, is the putting two *Ranks* into one.

RATION, is a Portion of Ammunition, Bread or Forrage, distributed to every Man in the Army. A *Foot Soldier* receives a *Ration* of Bread, which is a Pound and a half for each Day; and a *Trooper* a *Ration* of Bread, and another of Forrage.

RAVELINS, are Works raised on the *Counterscarp* before the *Curtin* of a Place, and serve to cover the Gates of a

REA

Town, and the Bridges. They consist of two *Faces* forming a *Saliant Angle*, and are defended by the *Faces* of the neighbouring *Bastions*. The *Half-Moons* which cover the Points of the *Bastions*, have their Defences from the *Ravelins*. They are the most in use of all Out-Works, and are by the Soldiers most commonly called *Half-Moons*. They ought to be lower than the Works of the Place, that they may be under the Fire of the Besieged, in case the Enemy should endeavour to lodge themselves there. Their *Parapets*, as those of all Out-Works, ought to be *Cannon-Proof*; that is to say, about 18 Foot thick; their *Ramparts* ought to be the half or third of one of the Flanks of the Place, and the Breadth of their *Moats* half the Breadth of the *Moat* of the Place.

REAR of an Army, or of a Battalion, signifies generally, either the hindmost part of the Army, or Battalion, or the Ground behind it.

Rear-Guard, is that Body of the Army which marches after the *Main Body*; for the March of an Army is always composed of an *Advance-Guard*, a *Main-Body*, and a *Rear-Guard*; the first and last commanded by a General-Officer in Person. The Old *Grand-Guards* of the

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Camp, are always the *Rear-Guard* of the Army, and are to see that every thing come safe up to the new *Camp*.

Rear-Half-Files, are the three hindmost Ranks of the *Battalion*, when it is drawn up six deep.

Rear-Line of an Army encamped, or *second Line*, is always 400 or 500 Yards distant from the first *Line*, which is likewise called the *Front-Line*; these two *Lines* run parallel, and have sometimes a third, which is called a *Reserve*.

Rear-Rank, is the last *Rank* of a *Battalion*, when drawn up.

RECOILE, or *Reverse of a Gun*, is its running back when fired, which is occasioned by the struggling of the Powder in the Chamber, and its seeking every way to fly out. Guns, whose Vents are a little forward in the *Chace*, recoil most. To lessen the Recoil of a Gun, the Platforms are generally made sloping towards the *Embrasures* of the *Battery*.

RECRUITS, are new Men raised to supply the Places of such as have lost their Lives in the Service, or are rendered unserviceable by Age or Wounds. *Recruit-Horses*, are the Horses brought up for completing the Regiments of Horse or Dragoons every Year.

RECTANGLE, see *Angle*.

RED

REDANS, or *Indented Works*, are *Lines* or *Faces* forming, sallying, and Re-entering Angles flanking one another, and are generally used on the Sides of a River, which runs through a *Garrison Town*. They were used before *Bastions* were, and are by some thought preferable to them.

REDOUBTS, are square Works of Stone raised without the *Glacis* of a Place, about a Musquet-Shot from the Town, with a *Foss* round them, having Loop-Holes for the *Musqueteers* to fire through; sometimes they are of Earth, having only a Defence in Front, surrounded with a *Parapet* and *Foss*: Both the one and the other serve for *detached Guards* to interrupt the Enemies Works. They are sometimes made for the *Angles* of the *Trenches*, for covering the Work-men against the Sallies of the *Garrison*. The Length of their Sides may be from ten to twenty Fathom; their *Parapet*, having two or three *Banquetts*, must be about nine or ten Foot thick, and their *Foss* the same, both the Breadth and Deepness; they contain a Body of Men for the Guard of the *Trenches*, and are likewise called *Places of Arms*.

REDUCE a Place, is to oblige the *Governour* to surrender

REG

der it to the Besiegers, by Capitulation.

REDUIT, *Castlo*, or *Don-john*, is a Place more particularly entrenched and separated from the rest by a *Foss*. There is generally in each of them a high Tower, from whence the Country round the Place may be discovered.

REFORM; *to reform*, is to reduce a Body of Men, by either disbanding the whole, or only breaking a Part, and retaining the rest; or sometimes by incorporating them into other Regiments.

REFORM'D-OFFICER, is one whose *Troop* or *Company* is broke, and he continued in whole or half Pay, doing Duty in the Regiment; he preserves his Right of Seniority, and continues in the Way of Preferment.

REGIMENT, is a Body of Men either Horse or Foot, commanded by a *Colonel*, *Lieutenant-Colonel*, and *Major*; each *Regiment* of *Foot* is divided into *Companies*, but the Number of *Companies* differ; though in *England* our *Regiments* are generally thirteen *Companies*, one of which is always *Grenadeers*. *Regiments* of *Horse* are most commonly six *Troops*, but some of nine. *Dragoon Regiments*, are generally in time of War eight

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Troops, and in time of Peace but six. Each *Regiment* has a *Chaplain*, and a *Surgeon*. Some *German Regiments* consist of 2000 *Foot*, and the *Regiment* of *Piccardy* in *France* of 6000, being 120 *Companies*, at 50 in a *Company*.

REGULAR-ATTACKS, are such as are made in form, that is, by *Regular Approaches*.

REINFORCED-RING of a *Gun*, is that next the *Turnions*, between them and the *Vent*. The reinforced part of a *Gun*, is from the *Base Ring* to the *Reinforced-Ring*, being much thicker of Metal than any other part of the Piece, because of the great Force of the Powder.

REINFORCEMENT *to an Army*, is an Addition of fresh *Troops* to strengthen an *Army*, and to enable them to go on with an Enterprize.

RELIEVE; *to relieve the Guard*, is to put fresh Men upon the *Guard*. *To relieve the Trenches*, is to relieve the *Guard* of the *Trenches*, by sending off those who have been there upon Duty before.

REMOUNT; *to remount the Cavalry of Dragoons*, is to furnish them with Horses in the room of those which have been either killed or disabled.

RESERVE, is a Body of *Troops* sometimes drawn out of

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of the Army, and encamped by themselves in a *Line* behind the other two *Lines*. See *Camp*.

RETIRADE, is a *Trench* with a *Parapet*. But *Retirade* or *Coupure*, is most ordinarily taken for a *Retrenchment* formed by the two Faces of a *Re-entring Angle* in the Body of a Place, after the first Defence is ruined, and the Besieged obliged to abandon the Head of the Work, without quitting it entirely; therefore, while some are making *Head* to the Enemy, others ought to be busy in making the *Retirade*, which is only a simple *Barricade* or *Retrenchment* thrown up in haste, with a sort of *Foss* before it; it depends upon the Knowledge of the *Engineer* to direct, and the Honour of the Officers and Soldiers to work at such a time, since they do it for the Defence of their Liberty; and no Officer ought to think it below him to carry *Fascines*, or to throw up Earth to cover himself. The *Retirade* ought to be raised as high as possible; and some *Fourneaus* or *Fougades* made under it, to blow up the Enemies *Lodgements*.

RETREAT, or *Tattou*, is a Beat of the *Drum* in the Evening, at the firing of a Piece, called the *Warning-Piece*, at which the *Drum-*

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Major, with all the Drums of the *Battalion*, except such as are upon Duty, beats round the *Regiment*; the Drums of the *Quarter-Guards*, of the *General's Guards*, and all other small Guards, do likewise beat, the *Trumpets* at the same time sounding at the Head of their respective Troops. This is to warn the Soldiers to forbear firing, and the Centries to challenge till break of Day, that the *Reveille* is beat. The *Retreat* is likewise called setting the Watch.

RETRENCHMENT, is any Work raised to cover a Post, and fortify it against an Enemy, such as *Fascines* loaded with *Earth*, *Gabions*, *Barrels of Earth*, *Sandbags*, and generally all things that can cover the Men, and stop the Enemy. But it is more particularly applicable to a *Foss* bordered with a *Parapet*; and a Post fortified thus, is called *Post retrenched*, or *strong Post*. *Retrenchments* are either general or particular.

General Retrenchments, are new *Fortifications* made in a Place beleagued, to cover the Defendants, when the Enemy become Masters of a Lodgment on the Fortification, that they may be in a Condition of disputing the Ground Inch by Inch, and of putting a Stop to the

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the Enemy's Progress, in Expectation of Relief. As, if the Besieged attack a *Tenaille* of the Place which they judge the weakest, either by its being ill flanked, or being commanded by some neighbouring Ground; then the Besiegers make a great *Retrenchment*, inclosing all that part which they judge in most Danger. These ought to be fortified with *Bastions* and *Demi-bastions*, with a good *Foss*, and should be higher than the Works of the Place, that they may command the old Works, and give the Besiegers great Trouble in covering themselves; they ought likewise to be countermined.

Particular Retrenchments, are such as are made in the *Bastions*, when the Enemy are Masters of the Breach. They can never be made but in full Bastions, for in empty or hollow Bastions there can be made only *Retirades*. These particular *Retrenchments* are made several Ways, according to the time they have to cover themselves; sometimes they are made before-hand, which is certainly the best; and a *Retrenchment* made before-hand, requires no more Men for its Defence, than if it were not made, because they never defend it till the principal Work be lost. The Parapets of such

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Retrenchments ought to be five or six Foot thick, and 5 Foot high, with a large and deep Foss, from whence ought to run out small *Fougades* and *Countermines*.

RETURNS of a Mine, are the Turnings and Windings of the *Gallery*; see *Gallery* and *Mine*.

Returns of a Trench, are the Turnings and Windings which form the Lines of the *Trench*, and are as near as they can be made parallel to the Place attacked, to shun being infiladed. These *Returns*, when followed, make a long Way from the End of the Trench to the Head, which going the straight way is very short, but then the Men are exposed.

REVEILLE, is a Beat of the *Drum* about break of Day, to advertise the Army that it is day Light, and that the Centries forbear challenging.

REVERSE, signifies on the Back, or behind. So we say, *Reverse View*, a *Reverse commanding Ground*, a *Reverse Battery*, &c.

REVIEW, is the drawing out all, or Part of the Army in Line of Battle, to be viewed by the General, that he may know the Condition of the Troops.

RHILAND-ROD, is a Measure of two Fathom, or twelve

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twelve Foot, used by the *Dutch Engineers*.

RHOMB, is a four sided Figure, whose Sides are equal, but the Angles unequal.

RHOMBOIDE, is a four sided Figure, whose Angles and opposite Sides are equal, but all its four Sides are not equal.

RIDEAU, is a rising Ground or Eminence commanding a Plain, which is sometimes near parallel to the Works of a Place. It is a great Disadvantage to have *Rideaus* near a Fortification, especially when they shoot from far, and terminate on the *Counter-scarp*; for they not only command the Place, but likewise facilitate the Enemies Approaches.

Rideau, is likewise a *Trench* covered with Earth, in form of a Parapet to cover the Soldiers.

ROLL; *Muste-Roll*, is a Scroll of Parchment, which each *Captain* gives the *Muste-Master*, on which are writ the Names of the Soldiers of his Company.

To roll in Duty, is when Officers of the same Rank take their Turns upon Duty, as *Captains* with *Captains*, and *Subalterns* with *Subalterns*, and command according to the Seniority of their Commissions.

ROLLERS, are round Pieces of Wood of about 9 Inches

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diameter, and four Foot long, which serve in moving Mortars from one Place to another, when it is near, by raising the fore part of the Bed so high, that one of these *Rollers* may be laid under it; then pushing the Bed forwards, and laying another in its Way, and another before that, and so on: Thus the Mortar is with little trouble brought to another Place.

ROUND, is a Night *Watch* commanded by an Officer, who goes round the Rampart of a Garrison, to listen if any thing be stirring without the Works, and to see that the Centries be diligent upon their Duty, and that every thing be in order: In strict Garrisons, the *Rounds* go every quarter of an Hour, that the Rampart may still be furnished: The Centries ought to challenge at a distance, and are to rest their Arms as the *Round* passes, letting no Man come near them. When the *Round* is near the *Corps de Garde*, the Centry calls aloud, *Who comes there*; when it is answered, *the Round*; he says, *Stand*, and calls for the Corporal of the *Guard*, who drawing his Sword, calls, *Who comes there*, and is answered, *The Round*; then, *let him who has the Word Advance*. The Corporal receives the Word with his Sword drawn, and pointed

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at the Heart of him who gives it. When the Major goes the Round, the Officers of the Guard receive him with two Musqueteers, and give him the Word only once, which is when he goes his *Round-Major*. When the Governour goes his Round, the Officers draw out the Guard without Arms, and send four Musqueteers to receive him at ten Paces Distance, and give him the Word as often as he pleases to demand it: All other Rounds, without Exception, are obliged to give the Word to the Corporal of the Guard.

To RUN the Gauntlet, is a Punishment for considerable Offences; when a Soldier is sentenced to run the *Gauntlet*, the Regiment is drawn out, and make a Lane, each Soldier having a Switch in his Hand; the Criminal's Shoulders and Back are naked, and as he runs along, every one has a Stroke at him; while he runs, the Drums beat at each end of the Lane; sometimes he runs three times, sometimes 5, and sometimes 7 times, according to the Nature of the Offence.

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SAFE-GUARD, is a Protection granted by a Prince or his General to some of the En-

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mies Lands, to preserve them from being plundered. It signifies likewise a Trooper, who stays at the Entry of a Place protected, to hinder Soldiers which straggle off from the Army, from committing any Disorder.

SAKER, is a Piece of Ordnance, carrying a Ball of five Pound and a Quarter weight; the Diameter of the Bore is 3 Inches and 9 Sixteenths of an Inch; the Length of a Gun about 8 or 9 Foot; it is a very good Field-Piece, and is always a part of the marching Artillery.

SALLY, is when the Besieged march out a part of the Garrison in the Night time, to attack the Besiegers in their Works, to nail their Guns, and to hinder the Progress of their Approaches. When a Place besieged is weak in Men, they make few Sallies; but when the Garrison is strong, and the Inhabitants numerous, the Governour ought to disturb the Enemy by frequent Sallies, which ought to be as secret as possible. Those who make the Sally, are to be armed with short Arms, and are to have *Grenades*, *Firepots*, *Gouderons* and *Pioneers*, to destroy and level the Enemies Works.

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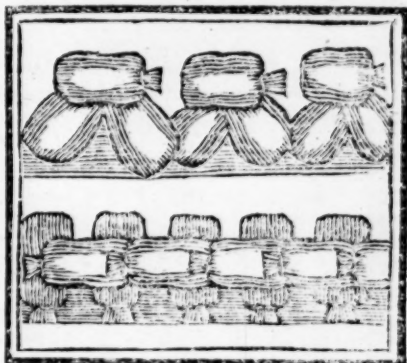
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Person of extraordinary Quality at his coming into a Garriſon, is the firing of the Cannon round the Place: Likewise in the Field, when a Regiment is to be viewed by a King or his General, the Drums beat a March as he approaches, and the Officers ſalute one after another as he paſſes by, ſtepping back with the right Foot and Hand, and bowing the Spears of their Half Pikes to the Ground, and afterwards recovering them Gently, and bringing up the Foot and Hand, and planting them. As ſoon as they have ſaluted, they are to pull off their Hats without bowing, but ſtanding upright. The Enſigns ſalute all together, bringing down their Colours near the Ground directly before them at one Motion, and having taken them up again gently, liſt their Hats. If it be a Review of the Army, every Battalion is to ſalute with Pikes and Muſquets charg'd.

SAND-Bags, are Bags containing about a cubical Foot of Earth; they are uſed for raiſing Parapets in haſte, or to repair what is beaten down; they are of uſe when the Ground is rocky, and affords no Earth to carry on their Approaches, becauſe they can be eaſily brought from far, and removed at will. The ſmaller

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Sand-Bags contain about half a cubical Foot of Earth, and



ſerve to be placed on the Superior Talus of the Parapet, to cover thoſe behind, who fire through the Embraſures or Intervals left betwixt them.

SAP, is the digging gradually deep under the Earth, to paſs under the Glacis, and open a Way to come under Cover to the Paſſage of the Moat. After they have overcome all the Obſtacles which the Beſieged have oppoſed to hinder the Advancement of their Approaches, and that notwithstanding their frequent Sallies, they are at laſt got near the Foot of the Glacis, the Trench is carried directly forwards, the Workmen covering themſelves the beſt way they can, with Blinds, Woolpacks, Sand-Bags, or Man'elets upon Wheels; when they are got to the Foot of the Glacis, they make Epaulments or Traverſes on each Side to lodge

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a good Body of Men. The Sap is made five or six fathom from the Salient Angle of the Glacis, where the Men are only covered side-ways, wherefore they lay Planks over head, with Hurdles and Earth above them. Having by this means obliged the Enemy to quit the Covert-Way, the Pioneers, with Mantellets, Wool-packs, or Sandbags, make immediately a Lodgment, covering themselves the most advantageously they can, from the Fire of the opposite Bastion.

SARRAZINE, is the same with *Herse* or *Portcullis*, see *Herse*.

SAUCISSE, is a long train of Powder sewed up in a Roll of pitch'd Cloth, of about two Inches diameter; the Use of it is to fire Mines, or Caissions; the length of it must reach from the Mine to the place where the Engineer is to fire it, to spring the Mine.

SAUCISSONS, are *Faggots* or *Fascines*, used in covering of Men, or making *Epaulments*. They differ from the ordinary *Fascines*, because they are made of thicker Wood or Branches of Trees, and tied at both ends and in the middle, and are about a foot and a half or two foot thick, and four foot long. They are good to stop Passages, and being mixed with

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Earth and Fascines to make Traverses over a wet Ditch.

SCALADE, or *Escalade*, is a furious Attack upon a Wall or Rampart, contrary to Form, and with no Precaution, carried on with Ladders, to insult the Wall by open Force.

SCALE, is a right Line divided into equal Parts, representing Miles, Fathoms, Paces, Feet, Inches, or any other Measure; it is used in making Plans upon Paper, in giving each Line its true Length.

SCARP, or *Escarpe*, is the Interior Talus or Slope of the Ditch next the Place, at the Foot of the Rampart or *Liziere*.

SCHENOGRAPHY, which is likewise called *Profile* or *View*, is the natural Representation of a Place, such as it appears to us, when we look upon it, from without, considering its Situation, the Form of its Walls, the Number and Figure of its Steeples, and the Tops of its Buildings, both publick and private.

To SCOUR a Line, is to flank it so as to see directly along it, that a Musquet-Ball entring at one end, may fly to the other, leaving no place of Security.

SENIORITY, is the difference of time betwixt the raising of two Regiments, whereby the one is said to be
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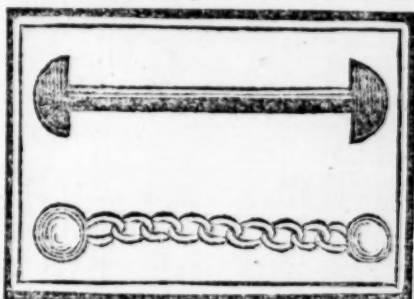
so much Senior than the other; all Regiments take place according to Seniority. The difference of time betwixt the Date of two Commissions makes the one Senior to the other; and all Officers of the same Rank, roll by the Seniority of their Commissions.

SERGEANTS, are Staff-Officers in a Company of Foot, and are obliged to keep a List of the Soldiers and their Lodgings, and to visit them often; they are to teach the Company the Exercise of their Arms, and how they are to keep their Ranks and Files; their Post on a March is on the Flanks, to cause the Company to march in good Order. A Sergeant of each Company is to be on the Parade at Night, to receive the Orders and the Word from the Adjutant, which he is to carry to his Captains and Subalterns: When the Adjutant comes, the Sergeants place themselves in a Ring with him, according to the precedency of their Companies, with their Hats on the Spears of their Halberds; and after he has given them the Orders, he whispers the Word to the first *Sergeant*, who gives it to the next, and so on, till it come to the youngest, who gives it to the Adjutant. They acquaint the Officers who are to go next

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upon Duty; they visit the Mens Arms, and distribute Ammunition to them.

Chain-Shot, is two whole or



half Bullets joined together, either by a Bar or Chain of Iron, which allows them some liberty asunder, so that they cut and destroy whatever happens in their way, and are very serviceable in a Sea Battel, to cut the Enemies Sails.

SHOULDER of a *Bastion*, is where the Face and the Flank meet.

SIDES of *Horn-works*, *Tenailles*, *Crown-works*, &c. are those parts of their Ramparts which reach from the Border of the Foss of the Place, to the Head of the Work, which in *Horn-works* and *Tenails* are parallel; sometimes these Sides are no longer than the reach of a Musquet-Shot, and are then defended from the Faces of the Place; but when they are longer, they have either Flanks made in the long Sides, which are then said to have Shoulders; or else they are indented or

S I E

made with Redans, or with Traverses or cross Entrenchments in the Ditch.

SIEGE, is the Encampment of an Army entrenched and fortified round a place with an Intention to take it. When a General designs to besiege a Place, he must first order it to be invested by a Body of Horse, under the Command of a Lieutenant-General, to prevent any Succours from entering the Place. The method of encamping in a Siege differs from that on a March; for in a Siege the Army surrounds the Place that nothing may enter, and lies without Cannon-shot of the Town. If the Place be situated on a River, part of the Army is detached to the other side; and Bridges of Communication are made above and below the Town, with Redoubts guarded by a Body of Foot. If the Place be encompassed with Mountains, they possess all the Heights from whence they can gaul the Enemy. At a Siege the Army encamps with their Backs to the Place; Battalions and Squadrons interlined. The Engineers trace the Lines of Circumvallation and Contravallation, with Redoubts and Angles, at proper Distances, and every Regiment works at the Place appointed them. The

S I E

Line of Circumvallation is without the Camp to prevent Succours. The Line of Contravallation, is that betwixt the Army and the Place, and it covers the Besiegers from the Sallies of the Garrison. When the General has disposed his Camps, placed his Guards, and established the Lieutenant-Generals to command in the particular Quarters, with Orders for their Conduct, he goes with the Engineers to view the Place, and orders the Attack in the Quarter he judges the weakest; but because it is difficult to find two places situated after the same manner, so it is hard to make two Sieges in the same way; for there are some Towns, where without opening Trenches, the Besiegers advance immediately and lodge themselves on the Counterscarp, by the Facilitation of Hollow Ways, Ruins, Cavities, or weak Suburbs. And there are others, where the Ground is better managed, where within Cannon-shot of the Out-works, there is nothing which can facilitate the Enemies Approaches. To such sort of places, which are not the worst, there must be Trenches and Approaches to gain the Ground foot by foot, which renders such Sieges dangerous and very long, because of many

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ny Accidents which happen daily in the Attacks, Sallies, and Mines, and other Accidents of War.

To make or form a Siege, there must be an Army sufficient to furnish five or six Reliefs for the Trenches, Pioneers, Guards, Convoys, Escorts, and what else may happen: An Artillery, with Magazines furnished with a sufficient quantity of Ammunition, and Provisions: And an Hospital with Physicians, Chirurgeons, &c. and Medicines.

To turn a Siege into a Blockade, is to give over the Attacks, and possess all the Avenues leading to the Place, to hinder any Succours or Convoys getting into it, with a Design to take it by Famine.

SILLON, is a Work raised in the middle of a Foss, to defend it when it is too wide: It has no particular Form, sometimes being made with little Bastions, Half-Moons, and Redans, which are lower than the Works of the Place, but higher than the Covert-Way. This Work is now called *Envelope*.

SIXAIN, an antient Order of Battle for six Battalions, which, supposing them all in a Line, is formed thus. The second and fifth Battalions advance and make the Van, the

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first and sixth fall to the Rear, leaving the third and fourth to form the Body. Each Battalion ought to have a Squadron on its Right, and another on its Left. Any number of Battalions produced of the number six, may be drawn up by this Order; so 12 Battalions may be put in two *Sixains*, and 18 Battalions in three *Sixains*.

SKIRMISH, a sudden Encounter between two small Bodies of Men, without Order.

To SPIN Hay, is to twist it up in Ropes very hard for an Expedition in the Winter time; each Trooper carrying as much as he can behind him.

SPUNGE of a Gun, is a long Staff put into a roll of Wood, which is covered over with a Sheep-skin, the Wool outwards, to sponge and clean the Gun. As soon as the Gun has fired, a Matross is ready with the *Spunge*, while another claps his Finger on the Vent to stop the Air, and stifle what Fire may remain in the Chamber. The *Spunge*, *Rammer*, and *Ladle*, after the Gun is loaded, are laid under her betwixt the Wheels.

SQUADRON, is a small Body of Horse, composed of 3 Troops, each 50 Troopers, making 150, and sometimes 200, when the Troops are larger, but never above that; because

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because a greater number can never be advantageously posted, nor have room to act in narrow Grounds. The eldest Troop takes always the Right of the Squadron; the second the Left, and the youngest the Centre. A *Squadron* is always drawn up three deep, that is to say, in three Ranks; having the length of a Horse, or rather more between Rank and Rank. The Standard is always in the Centre of the first Rank. When the Army is encamped, a *Squadron* of Horse is allowed 30 Paces for their Front, and 30 Paces Interval between one *Squadron* and another; on a March the *Squadrons* of the same Column ought to keep a convenient distance.

SQUARE *Battalion of Men*, is that which is composed of an equal number of Men in Rank and File, or when the number of Men in each File, is equal to the number of Men in each Rank. *Square Battalion of Ground*, is when the Ground of the Flanks is of the same Extent, as the Ground of the Front and Rear. To make a *square Battalion of Men*, whose number is known, as 50, take the nearest Radix or square Root, which is seven, for the number of Men in Rank and File. To make a *square Battalion of Ground*, the number

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being likewise determined, as 60, *Manesson Mallet* says, that Number must be multiplied by 3, which is the number of feet that every Man takes in Front, and the Product 180 divided by 7, which is the number of Feet that each Man taketh up in deepness, or the distance of the Ranks; the Quotient is 25; the square Root of which is 5, which is the number of Men in each File; and if by this Radix 5, you divide 60, the Quotient is 12 for the number of Men in each Rank.

Hollow Square, is a Body of Foot drawn up with an empty space in the middle for the Colours, Drums and Baggage, facing, and covered by the Pikes every way, to oppose the Horse.

STANDARD, is a piece of Silk or Damask, about a foot and a half square; on which is embroidered, the Arms, Device, or Cypher of the Prince, or of the Colonel: It is fixed on a Launce about 8 or 9 Foot long, and carried in the Centre of the first Rank of the Squadron; in rainy or bad Weather, it has a Case of Leather over it.

STAR-REDOUBTS are now out of Use. They were made with Salient and Re-entering Angles, and had from 5 to 8 Points; and each of their Sides

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Sides or Faces was from 12 to 25 Fathom long.

SUB-BRIGADEER, is a Post in the Troops of Guards, next under a Brigadeer.

Sub-Lieutenant, is an Officer in Regiments of Fufeleers where there are no Ensigns, having a Commission as youngest *Lieutenant*, and Pay only as Ensign; but takes place of all Ensigns, except the Guards.

Subsistence, is the Money paid to the Soldiers weekly, not amounting to their full Pay, because their Cloaths, Accoutrements, Tents, Bread, &c. are to be paid; it is likewise the Money paid the Officers upon Accompt, till their Accompts be made up, which is generally once a Year, and then they are paid their Arrears.

Sub-divisions, are the lesser Parcels, into which a Regiment is divided in marching, being half the greater Divisions.

Surface, in *Fortification*, is that part of the exterior Side, which is terminated by the Flank prolonged or extended, and the Angle of the nearest Bastion. The Double of this Line with the Curtin, is equal to the exterior Side.

SUTLER, is he who follows the Army to sell all sorts of Provisions to the Troops. They pitch in the Rear of each Regiment, and about the Generals Quarters.

T A L

SWALLOWS-TAIL, is an Out-Work differing only from a single Tenaille, in that its Sides are not parallel, like those of a Tenaille; but if prolonged, would meet and form an Angle on the middle of the Curtin; its Head or Front is composed of two Faces forming a Re-entering Angle. This Work is extraordinary well flanked and defended by the Works of the Place, which discover all the Length of its long Sides. But their great Fault is their not covering sufficiently the Flanks of the opposite Bastions.

T.

TAIL of the Trenches, or *Opening of the Trenches*, is the Post where the Beliegers begin to break Ground to cover themselves from the Fire of the Place, in advancing the Lines of Approach.

TALUS, is the Slope given to the Rampart or Wall, that it may stand the faster. All Ramparts ought to have a Talus on each side; that is, they ought to be broader at the Basis, than at the Top: the one is called the Exterior Talus, and the other the Interior Talus. And there is likewise a superiour Talus. See *Profile*.

Exterior Talus, is the Slope given

T A L

given to a Work, on the side towards the Country, and ought to be as small as possible, that the Enemy may not find it easy to be mounted, either by Scallade or otherwise. But if the Earth be not good, the *Talus* must be large, that it may keep it up the better. In such a case it were good to support the Earth with a Wall, which the *French* call *Chemise*, when it is not thick, and otherwise *Revetement*, which signifies cloathing or fencing, to make the Earth last longer, and to save the making too large a *Talus*. This Wall ought to have a small *Talus* of a fifth or sixth part of its height, and for a Reinforcement it is generally supported in the inside by Counter-forts, or a sort of Buttresses.

Interior Talus, is the Slope of the Work next the Town, which is much larger than that of the outside; and has at the Angles of the Gorge, and sometimes in the middle of the Curtain, Ramps, or sloping Roads, to mount upon the *Terre-plein* of the Rampart. The *Interior Talus* of the Parapet, ought to be very small, that the Men may with more ease fire over it. See *Profile*.

Superior Talus of the Parapet, is the Slope on the top of the Parapet, marked 13, 12, in the Figure at *Profile*. This

T E N

Slope allows the Soldiers to defend the Covert Way with small Shot, which they could not do were it level.

TATTOU, see *Retreat*.

TEMOINS, is a *French* Term for the pieces of Earth left standing as Marks or Witnesses, in the Fosses of Places they are emptying, to the end they may know exactly how many cubical Fathoms of Feet of Earth has been carried away, thereby to pay the Work-men.

TENAILLE, is an Out-Work longer than broad, whose long Sides are parallel; and is either single or double. There are likewise *Tenailles* in the Foss.

Single Tenaille, is a Work whose Front is advanced towards the Country, having two Faces forming a Re-entring Angle; its two long Sides terminate on the Counterscarp, opposite to the Angle of the Shoulder.

Double Tenaille, is a Work whose Front having four Faces, forms two Re-entring, and three Salient Angles; its long Sides are likewise parallel, and terminate on the Counterscarp, opposite to the Angle of the Shoulder. Both the single and double *Tenailles* have this fault, that they are not flanked or defended at the Re-entring Angle, because the height of the

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Parapet hinders the Soldiers from discovering before that Angle. Therefore *Tenailles* are only made when there is not time enough to make Horn-works. The Ramparts, Parapets, Fosses, Covert-Way, and Glacis of *Tenailles*, are the same with other Out-Works.

Tenaille in the Foss, is a low Work raised before the Curtin in the middle of the *Foss*, and is of three different sorts. The first is composed of a Curtin, two Flanks, and two Faces. The Rampart of the Curtin, including the Parapet and Talus, is but five Fathom thick, but the Rampart of the Flanks and Faces is seven. The second is composed only of two Faces, made on the Lines of Defence, whose Rampart and Faces are parallel. The third differs from the last, only in having its Rampart parallel to the Curtin of the Place. All these sorts are very good Defences for the *Foss*, and lie so low, that they cannot be hurt by the Besiegers Cannon, till it be on the Covert-Way.

Tenaille of a Place, or *Front of a Place*, is what is comprehended between the Points of two Neighbouring Bastions, as the Faces, the Flanks, and the Curtin. So it is said, The Enemy attacked the whole *Te-*

T R A

naille of a Place, when they made two Attacks on the Faces of the two Bastions.

TERRE-PLEIN of a Rampart, is the Horizontal Superficies of the Rampart, between the Interior Talus and the Banquett; 'tis on the *Terre-plein*, that the Defendants go and come; it is likewise the Passage of the Rounds.

To *TERTIATE a Piece*, is to examine whether it has the due thickness of Metal in every place, and whether it be true bored.

TOISE, is a Measure used by the *French* Engineers in all their Fortifications, and is six Foot; a square *Toise* is 36 square Feet, and a cubical *Toise* is 216 cubical Feet.

TOMPION, is a Stopple of Wood or Cork, which is used in loading a Mortar; it is exactly fitted for the mouth of the Chamber, and is drove hard in after the Powder, and the Bomb is placed above it; it serves by confining the Powder, to make it burst out with the more Violence. *Tompion* is likewise a Stopple of Wood for the Mouth of the Mortar or Gun, to keep out the Rain.

TRANSUM, is a piece of Wood which goes a-crofs betwixt the Cheeks of a Gun-Carriage, or of a Gin, to keep them fixed together; each

Transum

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Transum in a Carriage is strengthened by a Bolt of Iron.

TRAVERS, is a Trench with a little Parapet, sometimes two, one on each side; to serve as a Cover from the Enemy that might come on their Flank: sometimes it is covered over-head with Planks, and loaded with Earth. They are very advantageous in stopping an Enemy's Way, and to prevent being enfiladed. They are likewise a good Defence in a dry Foss, in making the Parapet on the side next the opposite Flank.

Traverse in a wet Foss, is made by throwing into the *Foss* over against the place where the Miner is to be put to the Foot of the Wall, abundance of Saucissons, Joysts, and other pieces of Wood, with Fascines, Stones, Earth, and all other other things which can help to fill up the Foss, and be capable of carrying a Gallery for such as use it.

Traverse is likewise a Wall of Earth or Stone cross a Work which is commanded, to cover the Men.

To Traverse a Gun or Mortar, is to bring her about with Hand-spikes to the Right or Left, till she is pointed exactly at the Object.

Trench, which is likewise called *Lines of Approach*, and

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Lines of Attack, is a Way hollowed in the Earth, in Form of a Foss, having a Parapet towards the Place besieged, when the Earth can be removed; or else it is an Elevation of Fascines, Gabions, Wool-Packs, and such other things that can cover the Men, and that does not fly in pieces or splinters to hurt them: This is to be done when the Ground is rocky, but when the Earth is good, the *Trench* is carried on with less trouble; and the Engineer is to demand only Provision of Spades, Shovels, and Pickaxes, to enlarge the *Trench* 5 Foot deep, and 2 Fathoms wide. The greatest Fault a *Trench* can have, is to be enfiladed; to prevent which they are usually carried on with Turnings and Elbows. As the *Trenches* are never carried on but in the Night-time, therefore the Ground ought to be exactly viewed, in the Day. On the Angles or Sides of the *Trench*, there ought to be Lodgments or Epaulments in form of Traverses, to hinder the Sallies of the Garrison, and favour the Advancement of the *Trenches*, and to sustain the Work-men. These Lodgments are small *Trenches* fronting the Place besieged, and joining the *Trench* at one end. The Platforms for the Batteries are made

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made behind the Trenches, the first at a good Distance, to be used only against Sallies of the Garrison; as the Approaches advance, the Batteries are brought nearer, to ruin the Defences of the Place, and dismount the Artillery of the Besieged: The Batteries for the Breaches are made, when the Trenches are advanced near the Covert-Way. If there be two attacks, there must be Lines of Communication or *Boyaus* between the two, with Places of Arms, at convenient Distances. The Trenches ought to be six or seven foot high with the Parapet, which ought to be five Foot thick, and have Banquetts for the Soldiers to mount upon.

Returns of a Trench, are the Elbows and Turnings, which form the Lines of Approach, and are made as near as can be parallel to the Defences of the Place, to prevent their being enfiladed.

To mount the Trenches, is to mount Guard in the Trenches. *To relieve the Trenches*, is to relieve the Guards of the Trenches. *To dismount the Trenches*, is to come off the Guard of the Trenches. *To cleanse or scour the Trenches*, is to make a vigorous Sally upon the Guard of the Trenches;

TRU

forcing them to quit the Ground, breaking down the Parapet, filling up the Trench, and nailing their Cannon.

Counter-Trenches, are Trenches made against the Besiegers, which consequently have their Parapet turned against the Enemies Approaches, and are enfiladed from several Parts of the Place, on purpose to render them useless to the Enemy, if they chance to be Masters of them; but they ought not to be enfiladed or commanded by any Height in the Enemies Possession.

TROOP of Horse or Dragoons, is a small Body of about 50 or 60; sometimes more, sometimes less; commanded by a Captain. Each Troop has, besides a Captain, a Lieutenant, Cornet, Quarter-Master, and three Corporals, who are the lowest Officers in a Troop. A Regiment of Light Horse in England, consists of six Troops, and sometimes nine.

Troop; to beat the Troop, is the same with Assembly; see *Assembly*.

TRUMPET, Each Troop of Horse has two Trumpets. The sound of the Trumpet before a March, is to Boot and Saddle, at which the Troopers get themselves ready to mount; this

VAN

this is sounded when the Drums beat the General. When the Assembly is beat, the Trumpet sounds *to Horse*, and they all mount; the third is *to march*. The Trumpets likewise sound a Charge in Day of Battle, and the Retreat at Night.

TRUNIONS of a Gun, are the two Pieces of Metal sticking out on the sides of a Piece, by which it swings in its Carriage. They are generally the Diameter of the Ball of the Piece in Length, and their Diameter is the same with the Diameter of the Ball. The Axis of the *Trunions*, is equal with the lowermost Side of the Chace of the Gun.

Trunion-Ring, is that Ornament or jutting out a little before the *Trunions*.

V.

VAN, or *Van-Guard*, is that part of the Army which marches in the Front. See *Guard*.

VEDETTE, is a Centry on Horse-back, or a Trooper upon a Centry Post. His Horse Head is towards the Place from whence any Danger is feared, and his Carabine is advanced with the Butt End against his right Thigh; when

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the Army lies encamped, there are *Vedettes* posted at all Avenues, and on all rising Grounds, to watch for its Security.

To **VIEW** a Place in order to besiege it, which the *French* call *Reconnoitre*, is when the General accompanied by the Engineer, rides round the Place, observing the Situation of it, with the Nature of the Country about it; thereby to judge of the most convenient Place for opening the Trenches, and carrying on the Approaches; to find out proper Places for encamping the Army, for the Lines of Circumvallation and Contravallation, and for the Park of Artillery.

To View or Reconnoitre an Enemy, is to get as near their Camp as possible, to see the Nature of the Ground, and the Avenues to it, to find out the Strength and Weakness of their Encampment, where they may be best attacked, or whether it be proper to hazard bringing them to Action. Parties of Horse, are generally sent out to view the Enemies March, to know whither it tends, thereby to guess at their Designs, and to regulate the Motions of the Army accordingly.

To view or reconnoitre, is likewise when the Quarter-Master-General, with a strong Party

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Party of Horse, goes to view the Ways for the March of the Army, and to find the most convenient Place for an Encampment.

VOLUNTEERS, are Persons of Quality, who serve in the Army, without being engaged to any Captain; but upon their own Expence are ready upon all Occasions to gain Honour and Preferment, by exposing themselves in the Service.

W

W ADD, is a Stopper of Hay or Straw forced into a Gun upon the Powder, to keep it close in the Chamber; when it is home at the Powder, the Gunner gives it generally three thumps with the Rammer Head.

WAD-HOOK or *Worm*, is a small Iron turned Serpent-wise, like a Screw, and put upon the end of a long Staff, to draw out the Wad of a Gun when she is to be unloaded.

Waggon-Master-General, is he who has the ordering and marching of the Baggage of the Army. On a Day of March, he meets the Baggage at the Place appointed in the Orders, and marshals it according to the Rank of the Brigade or Regiment each Waggon belongs to,

W H E

and marches it according to the Rout given him, which is sometimes in one Column, sometimes in two; sometimes after the Artillery, and sometimes the Baggage of each Column follows their Respective Column.

WARNING-PIECE, is the Gun which fires every Night about Sun-Set, to give Notice to the Drums and Trumpets of the Army, to beat and sound the Retreat or Tattou, which is likewise called setting the Watch.

WELL, is a Depth sunk in the Ground by the Miner, from whence he runs out Branches or Galleries in Search of the Enemies Mine to disappoint it, or to make a Mine.

WHEEL, is a Word of Command, when a Battalion is to alter their Front. When a Battalion is to wheel to the Right, every Man moves and wheels from the Left to the Right, only the Man on the right Angle turns very slowly, being as it were the Hinge on which the rest move. When a Battalion is commanded to wheel to the Left, the Soldier on the left Angle turns slowly, while the Right wheels from the Right to the Left. When the Word of Command *Wheel*, is given to a Division of Men upon a March, if it be to

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the Right, the Right-hand Man keeps his Ground, turning only on the Heel, while the Left-hand Man moves about quick, till he makes an even Line with the Right-hand Man. If it be *Wheel to the Left*, the contrary is to be observed. *To wheel by single Ranks*, if it be to the Right, the Right-hand Man of each Rank turns on his Heel, while the Left-hand Men move round, and the whole are formed into one Rank, fronting as their Flank was before. To reduce them into Ranks again, the Left-hand Men turn on their Heels, while the Right-hand Men move round. The motion of wheeling is of great use, if a Battalion be threatned with an Attack upon its Flank, or if there be a Design of falling upon the Enemies Flanks. Squadrons of Horse wheel after the same manner.

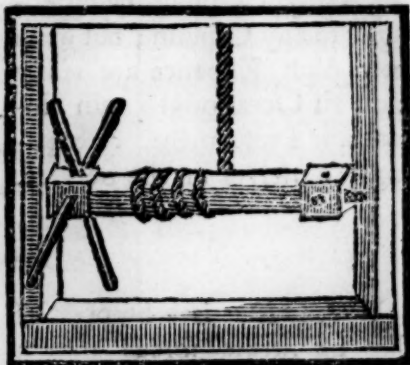
WICKET, is a small Door in a Gate of a fortified Place, at which a Man on Foot may get in, which is sometimes opened when the Gate is ordered to be kept shut. The Height of it is about three Foot and a half, and the Breadth two.

WINDAGE of a Gun, is the Difference between the Diameter of the Bore, and the Diameter of the Ball; for since

WOR

the Balls are rough, if they were not somewhat less than the Bore, they might jamme in the Piece; so the *Windage* of a Demi-Culverin is a quarter of an Inch.

WINDLACE, is a Roller



of Wood, square at each End, through which are either Cross Holes for Hand-Spikes, or Staves across, to turn it round; by this means it draws a Cord, one End of which is fastened to some Weight which it raises up. They are used in Gins, and about *Dutch Mortars*, to help to elevate them.

Wings of a Battalion, are the Right and Left-Hand *Files*; when a Battalion is drawn up, the Divisions on the Right and Left are called the *Wings*.

WORD in an Army or Garrison, Mark of Distinction, by which Spies or treacherous Persons are known; it serves likewise to prevent Surprizes. It is given out every Night by the

W O R

the General to the Lieutenant General, or Major General of the Day, who gives it to the Majors of Brigades, they to the Adjutants, who give it first to their Field-Officers, and afterward to a Serjeant of each Company, who carry it to the Subalterns. In a Garrison it is given by the Governour after the Gates are shut, to the Town-Major, who gives it to the Adjutants, and they to the Serjeants.

Words of Command, are the Terms used by Officers in exercising Battalions or Squa-

Y O U

drons, or when they are upon Action.

WORKS; all the Fortifications about a Place, are called the *Works of the Place*; and more particularly all detached Works, are called the *Out-Works*.

Y.

YOUNGER Officer, is he whose Commission is of a later Date.

Younger Regiment, is that which is of a shorter standing, with Relation to another.



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